



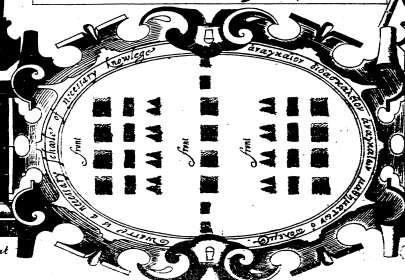
THE TACTICS OF
ÆLIAN *Lib. 61.1*

Or art of embattailing an army
after v^e Grecian manner

Englished & illustrated wth figures throughout
& notes upon y^e Chapters of y^e ordinary
motions of y^e Phalange by J. B.

The exercise military of y^e English by y^e order
of that great Generall Maurice of
Nassau Prince of Orange &c
Gouernor & Generall of y^e
misc Provinces is added

London for Laurence Lish & are to be sold at
his Shop at y^e signe of y^e Tiger Head
in Pauls Church ward.



Woudrichem in Hollandia



94-273



TO THE HIGH AND MIGHTY CHARLES, ONLY.

SONNE OF HIS MAIESTY, PRINCE OF
Wales, DUKE of Cornwall, Yorke, and Albany, MAR-
QVISE of Ormont, EARLE of Chester, and Roß,
LORD of Admanoch, and KNIGHT of the
most noble order of the Garter.



Ow much the *Gracians* excelled all o-
ther Nations in the Sciences called
Liberall, is better knowne in gene-
rall, then needfull at this time parti-
cularly to be rehearsed to your *Hig-
nesse*. The *Romans* themselues albeit
otherwise ambitious, and out of mea-
sure thirsty of honour, and challen-
ging to themselues the highest degree of grauity, constan-
cie, greatnesse of minde, wisdom, faith, and skill of war,
contended not herein, but freely left them the possession
of that praise vnquestioned. For warre it is not my pur-
pose at this time to make comparison, or commit the two
Nations together. The controuersie is already moied by
other, and hangeth vndecided in the Court of learning.
Thus much, me thinks, I may truly affirme, that the *Gra-
cians* were the first, that out of variety of actions, and long
experience reduced the knowledge of Armes into an *Arte*,
and gaue precepts for the orderly moving a *Battaille*, and
taught, that the moments of victory rested not in the

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hands

hands of multitudes, but in a few men rightly instructed to manage armes, and trained vp in the obseruation of the discipline of the field. In which regard they had almost in all Cities amongst them Masters of Armes, whom they called *Tacticks*, which deliuered the Arte Military to such, as were desirous to learne. Out of whose Schooles issued those chiefs of warre in number so many, in skill so exquisite, in valor so peerelesse, in all vertues befitting great Generals so admirable, that no Nation of *Europe* euen to this day hath been able to match, much lesse to ouer-match their fame, and glory. And the time was when the *Lacedemonians* exceeded the rest in Martiall skill, and were thought to be the best Souldiers of *Greece*; by means whereof they aduanced themselves to the Principality of *Greece*, which they held with such reputation, that an enemy by the space of 500 yeeres was not seene within their Territory. Till at last growing insolent, and surfeiting of, and being not able to brooke their owne fortune, they sought to oppresse, and with wrong and force to possesse the City of *Thebes*, and stirred vp *Epaminondas* a *Theban* by birth, and from his tender yeeres nourished by his fathers care in the study of Philosophy, and the science of Armes, to oppose against them, who in two battailes, the one at *Leuctra*, the other at *Mantineia* so broke their forces, that from that day forth they were neuer able to recover their wonted authority, and power in the field. *Philip* the sonne of *Amyntas* King of *Macedonia*, being but a private man, was deliuered as a hostage to the *Thebans*, & brought vp in the same house and learning with *Epaminondas*. He afterward became King of *Macedonia*: which being of it selfe but a poore kingdom, and before his time sometimes kept vnder by the *Athenians*, sometimes by the *Lacedemonians*, sometimes by the *Thebans*, & finding it at his entrance

to

to the Crowne harried, and spoiled by the *Pæonians*, and forced to pay tribute by the *Thlyrians*, by erecting a new arte, and discipline of warre, to which he exercised, and enured his *Macedonians*, he not only freed his Countrey from the Barbarous nations, but also ouercame the *Grecians*, accounted the only Masters of armes till that day, and caused himselfe to be declared Generall of *Greece* against the *Persians*: against whom after he had made his full preparation, he resolved to go in person. But being preuented by death, he left the succession of his kingdom, and execution of his designes to *Alexander* his sonne, whom he had before curiously instructed in the discipline of Armes inuented by himselfe. The same *Alexander* (being about 20 yeeres of age) after he had vanquished *Darius* in 2 great battailes in 12 yeeres ran through, and subiected the spacious, rich, and flourishing kingdomes of *Asia*, euen as far, as the *East Indies*, and with terror of armes made the whole world to tremble at his name. His kingdomes were after his death diuided amongst many Successors, who by the same Arte military easily maintained the possession of their conquests. This Arte is it, that I at this time present vnto your Highnesse. It was comprised in writing by many, and yet none of their works attained our age, but only that of *Ælian*, who hath in a small volume so expressed the arte, that nothing is more short, nothing more linked together in coherence of precepts, and yet distinguished with such variety, that all motions requisite, or to be vsed in a Battaile are fully expressed therein. *Ælian* liued in the time of *Adrian* the Emperour. How much the booke was of ancient time esteemed may appear by this alone, that *Leo* a succeeding Emperour setting downe Martiall instructions for the gouernment of his Empire, transcribeth whole passages out of *Ælian*, & whensoever he citeth, or nameth the *Tacticks*, he giueth still the first place vnto *Ælian*.

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Howbeit

Howbeit the practise of *Aelians* precepts hath long lien wrapped vp in darknes, & buried (as it were) in the ruines of time, vntill it was reuiued, & restored to light not long since in the vnited Prouinces of the low-Countries, which Countries at this day are the Schoole of war, whither the most Martiall spirits of *Europe* resort to lay downe the Apprentiship of their seruice in Armes, and it was reuiued by the direction of that Heroicall Prince *Maurice* of *Nassau*, Prince of *Orange*, Gouvernour, and Generall of the said Countries, a Prince borne and bred vp in Armes, and (beside the completeness of his other eminent vertues) for skill, experience, iudgement, and military literature comparable to the greatest Generals, that euer were. I haue of late aduentured to take from *Aelian* his *Greekish* cloake, and to put him in *English* apparel, that in that habit he might attend your Highnesse, and be ready with his seruice, in case he were thought worthy of employment. He had before for his Patron *Adrian*, an Emperour, and Ruler of the *Roman* world. Now he humbly craueth your HIGHNESSES fauour for his protection, who as in Princely descent, and succession of Royall blood you are farre superior, so in vertues worthy of your birth, and yeares, and in all hopefull expectations are you nothing inferior to *Adrian*. It may please your Highnesse to regard him with a gracious eye, and to esteeme the Presentor of him your faithfull bedesman, that will not cease to pray to the mighty God of hosts, to giue you conquest ouer all your enemies. From my Garrison at *Woudrichem* in *Holland* the 20. of September 1616.

Your Highnesse most humbly
dewoied,

IO: BINGHAM.



THE TACTICKS OF *AELIAN*
or art of embattailing an army after the
Grecian manner.



THE *Grecian* arte of embattailing an army (most mightie *Augustus Cesar Adrian*) the antiquitie whereof reacheth back to the age wherein *Homer* lyved, hath bene committed to writing by many, whose skill in the *Mathematicks* was not reputed equal with myne: whereby I was induced to thinke it possible for me soe to deliver the groundes therof, that posteritie should rather regard and esteeme my labors, then theirs, that before me haue handled the same argument. But weighing againe myn own ignorance (for I must confesse a truth) in that skill & practise of armes, which is now in esteeme among the *Romaines*, I was by feare with-held from reuiuing a science half dead, as it were, and since the invention of that other by your auncestors, altogether out of request and vnregarded. Notwithstanding comming afterward to *Forme* to doe my dutie to the ¹ Emperour *Nerva* your maiesties father, It was my fortune to spend sometime with ² *Frontine* a man of Consular dignitie, and of great reputacion by reason of his experience

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in militarie affaires: and after conference with him perceiving he imparted no lesse studie to the *Grecian*, then to the *Romaine* discipline of armes I began not to despise that of the *Grecians*, conceiving that *Frontine* would not so much affect it, if hee thought it inferior to the *Romaine*. Having therefore in times past framed a project of this worke, but yet not daring then to publish it in regard of your majesties incomparable valour, and experience, which make you famous above all Generalls without exception, that euer were: I haue of late taken it againe in hand, & finished it, being (if I deceaue not my self) a worke both worthy to be accompted of, & of sufficiency, especially with such as are studious of the arte, to obscure the credit of the auncient *Tacticks*. For in respect of the perspicuitie I dare bouldlie affirme, the reader shall more advantage himselfe by this little volume, then by all their writings: such is the order and methode, I haue followed. Howbeit I durst scarcely offer it to your majestie who haue bene Generall of so great warres, least happily it proue too too slender a present, & altogether vnworthy of your sacred viewe. And yet if your majestie shall bee pleased to thinke of it, as of a *Greekish Theorie*, or a various discourse it may bee, it will giue you some little delight, the rather because you may therein behold ⁴ *Alexander the Macedons* manner of marshalling his fields. And for that I am not ignorant of your majesties more weightie affaires, I haue reparted it into chapters, to the end you may without reading the booke in few wordes take the somme of that, which is to bee delivered, and without losse of time find the places you are desirous to peruse.

Notes.

Notes.

THE Tacticks ^a As *Taxis* in a general sence signifieth order, so *Tacticos* is as much, as pertaining to order: but specially taken, it signifieth pertaining to order of a battaile, or to the embattailing of an army. Hereof the arte of embattailing an army is called *Tactice*, and hee, that is skilfull, and experienced in that arte, *Tacticos* (^a *Vegetius* na. a *Veget. prolog. lib. 1.* meth him magillitum armorum) and the books written of the arte, *Tactica*. And that this is the true signification of the word may appeare by *Xenophons Cyropædia*, where the arte of *Tactick* is distinguished from the arte imperatory, or arte of a Generall. Hee in duce^bth *Cyrus*, in a discourse with his father speaking thus: ^b In the end you asked mee what my master taught mee, when hee professed to teach the art Imperatory. And when I answered, the Tacticks, you smiled, and asked particularly, what the Tacticks availed without provision of things necessary to lue by: what without preservation of health? what without knowledge of arts invented for the vie of warre? what without obedience? so that you plainly shewed, that the Tacticks are but a small portion of the arte Imperatory, or of commanding an army. Thus *Xenophon*: making a difference between the arte Imperatory, & the arte Tactick. And in other place hee speaketh yes more particularly: ^c *Cyrus*, sayd hee, esteemed it not the duty of a Tactick to enlarge onely, or to stretch out in length the front of his Phalange, or to drawe it out in depth, or to reduce it from a winge to the front of his Phalange, or to countermarche readily, the enemy shewing himselfe on the right, or left hand, or in the rear, but to divide it, when need is, & to place euery part for most advantage, & to leade it on speedily, when occasion is of prevention. Yet sometimes in a general signification books treating of the whole arte of warr are called Tacticks: as the Constitutions military of the Emperour *Leo* are entituled *Tactica Leonis*, perhaps of the best parte, because the arte of embattailing an army hath alwayes been esteemed the chiefe^dst point of skill in a Generall. Howbeit *Ælian* in his title of this booke taketh *Tactick* in the streight^e sense of signification: as appeareth by the definitions, he allegeth out of *Æneas* and *Polibius*: of whom the first defineth the art Tactick to bee a science of warlike motion; ^f whome also *Leo* agreeth the other, to bee a skill, whereby, a man taking a multitude serviceable, ordereth it into files, and bodies, and insinuateth it sufficiently in all things appertaining to warre, which two definitions comprehend in few words the argument of the whole booke. For first *Ælian* instructeth of levieng, & of arming men, then of filing, next of joyning files, and making bodies, after of ordering the whole Phalange, or battaile, further of motions requirit to affront the enemy whersoever hee giueth on, whether in front, flank, or reare; lastly of marching, and of the sondry formes of battailes carieng with them advantage of charging or repelling the enemy in your marche. Hee that will further understand the boundes of this arte, let him reade in the 21. chapter of *Leo* the 18. section.

The Emperour *Nerva* your maiesties Father ^g The Emperour *Nerva* here mentioned was not *Nerva Cocceius*, whoe succeeded *Domitian*, but *Vipius Traianus*, who was also called *Nerva*, because he was adopted by *Nerva Cocceius*, & succeeded in the Empire. And where *Ælian* termeth him *Adrians* father, indeed *Adrian* pretended, he was *Traians* sonne by adoption. But *Dio* plainly denieth it, & *Spartian* saith, some report that hee was adopted by the faction of *Plotina* (*Traians* wife) by substituting one to speake with a faint voice, as if it had bene *Traian* upon his death-bed, whereas *Traian* was before departed this world. This is agreed, that he was *Cosin german*

^a *Veget. prolog. lib. 1.*

^b *Xenophon. cyropædia. lib. 2.*

^c *Xenophon cyropædia. lib. 8. c. 27.*

^d *Plotin. Philo. pænet. infra cap. 3.*

^f *Leo. cap. 1.*

^g *Dio & Spartian in vita. Adrian.*

german once removed to Traian, & that his father dying, he (being but ten yeares olde) was ward to Traian (then a private man) and to one Calius Tattianus.

2 To spend some time with Frontine] Frontine here mentioned was the same that wrote the book of Strategemes, now extant, & commonly joyned in one volume with Vegetius. Hee was a man curious in the searche of the Græcian discipline, as may be scene by his owne preface to his bookes of Strategemes: & by the testimony of Aelian, & in the first chapter of this treatise, is reckoned amongst the Tactick writers. * Vegetius repor-

first chapter of this treatise, is reckoned amongst the Tactick writers. & seems to be much esteemed by the Emperour Traian. He lived also in great reputation in the time of Vespasian: as least if it bee hee, that Traianus speaketh of in the life of Tullius Agricola. And yet it might bee very well, that being noe more then twenty yeares, & certaine moneths betwixt the reigns of Traian, & the reigns of Vespasian in whose time

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3 Your majesties intend a cause, may appeare by that, which *Ælius Spartianus* writes thus, *not alone in the name of Adria, His wordes haue this meaning:* After this, taking his journey into France, he was bountifull to all, as he faw cause. From thence he passed into Germany, and being rather desirous of peace, then warre, yet he so exercised his souldiers, as though warre were at hand; teaching them to endure paines & hardnesse, himselfe living an example of military life: gladly allowing Camp fare, as namely, lard, & cheefe, for meate, & water mingled with vineger for drinke, in imitation of Scipio *Æmilianus*, and of *Metellus*, and of *Trasian* the author of his preferment & rising, bestowing rewardes upon many, honours upon some, to encourage them to beare such things, as seemed hard and tedious. He was also very strict in his discipline, he kept the souldiers in the same military discipline (declining now through the remembrance of the payes, never suffering any man to absent himselfe from the Campe, but upon just cause: measuring the way to the Tribune, not by favour of the souldiers, but by their owne desert, exerting, & exciting all the rest by example of his owne vertue, whilst he often marched twenty miles on foote, being fully armed, broke downe banquetting howes, and galleries, & vaults for coolnesse, & arbors, wheresoever hee found them in the Campe; & was seene in a plaine garment vially, wore a baudricke nor garnished with gold, butons without gemmes; scarcely allowing a ivory handle to his sword; visited his sick souldiers in their lodgings, himselfe chose out the ground to encampe in: made no Captaine, but a man of a strong body, no Tribune, but with a grown beard, or of age, of great prudence, and yeares was able to sway the weight of the lawe, nor suffered him to take ought from the souldier; remembreing that he was a souldier, & not a prince, hee had besides consideration of the age of souldiers, allowing no younger, then was befitting vertue; nor elder, then stood with the lawes of humilitie, to bee conversant in the Campe, contr

tragedy

a Veget lib, 2.
cap. 8.

b Tact. in vita
Ag. coll.

c Dio in v. 2
Nerv.

d. Spartian.in
vita Adriani.

trary to old custom, and vsage : and gave himselfe to hate particular knowledge of them all, and what their number was. Furthermore he was careful to understand the controuersies betwixt souldier and souldier, and searched with great attentione into the revenues of the Provinces , to the end to supply , what was wanting ; endeavouring notwithstanding about all neither to buy, nor feede ought, that was not for vfe. Wherefore when he had finished his march, he came to the city of Burgh, which was the Burgh, where he directed many things, and was the first, that drew a wall along by the space of eighty mile, wherewith he diuided the Romans from the barbarous people. *Heriberto Spartian. I have recited the history as large, because I might represent the picture of an excellent General.*

4. Alexander the Macedonian manner.] That this booke comprehendeth the Macedonian discipline of armes, it will hence beereafter, as particulars offer themselves. In the mean time let this suffice for an argument, that *Ælian* dooth not to ascribe it to a *Ælian*, a Prince excellently learned in the Greeke language; and as by reason of his skill he was able to discern, so by his authority he would have censured so grosse an escape, if it had been otherwise, then *Ælian* reporteth.

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The Authors that haue written *Tactics*; of this booke, and of the profits, of the *Art*.

CHAP. I.

However the Poet seemeth to bee the first, (at least we reade of) that had the skill of imbattailing an army, and that admired men indued with that knowledge, as appeareth by *Mneſtheus* of whome he writeth.

*His like no living wight was found, nor any age did yeild,
 To Marshall Troopes of horse, or bandes of foote in bloudie field.*

Concerning *humers* discipline militarie, the workes of *Stratocles*, & of *Frontine* a man of Consular dignitie, in our time are to be read. *Æneas* perfected the Theorie thereof at large publishing many volumes of warfare, which were abridged by *Cyneas* the *Thessalian*. Likewise *Pyrrhus* the *Epirate* wrote *Tactics*, and his sonne *Alexander*, and *Clearchus*, and *Pausanias*, and *Æmangelus*, & *Polibius* the *Megapolitan* (a man of great learning, *Scipios* companion) & *Æmipolus*, and *Sphicrates*, *Polidamus* also the *Sioick* left forth the art of warre, & many other, some in Introductions, as *Brian*, some in large *Tactics* volumes. Al which, I haue seene, and read, and yet thinke it not much to purpose to mention particulerlie, being not ignorant, that it hath bene the manner of those writers for the most parte, to applie their stile not to the ignorant, but to such as are alreadie acquainted with the matters they intreat of; as for the impediments, which presented themselves to mee, when first I gaue my minde to the studie of this art, as namely neither to happen vpon sufficient Instruours, nor yet to find light, or perspicuitie enough in the precepts deliuered: I will endeavour, as much as I can, to remove out of other mens way. And as often as wordes shall faile to expresse my meaning, I will for plainenes sake, vse the direction of figures, and pourtraicts, adioyning thereby the view of the ey, as an aide, and assistance, to the vnderstanding, & withall retaine the termes of ancient authours, to the end, that whoeuer shal follow this booke for an introduction, being therein exercised both to the same wordes; & also to the visage of things expressed in them, may grow as it were acquainted, and imagine himselfe no straunger, when he cometh they will easely be vnderstood. Now that this art of all other is of most vse, may appeare by *Plato* in his booke of lawes where he saith: *That the Grecian Lawgivers* so contriued his Lawes, as if men were alway prepared to fight. For all cities haue by nature vnproclaimed warre one against another. Which being forwarth discipline is more to be esteemed, or more auaylable to mans life, then this of warre.

IT seemeth by this Chapter, that the Authors, that have of ancient time written Tackles, have bene many; and those not of such kind of men, as have given themselves to study, and contemplation alone, but of such, as besides their knowledge in good letters, were also skilful in warre themselves, & (which is more) principall actors, some of them Generalls, others the next degree to generalls. Howbeit there is none here mentioned by Aelian, whose works are extant. Whereby may be esteemed the ineffinable losse, these latter ages have suffred in being deprived of such excellent monuments. I hope, I may so terme them without offence, though I have not seene them. For what but excellency, may we thinke, that hath made them so much desired? And yet, if they be so goodly, how proceeded from men of such excellencie in their professions, that they might be remembered by posterity? Yet, for some of them, I can say farre things, which will give me remembrance of them in ancient writers. Of which I shall name a few, as Politenus, Stratocle, Hermias, Clearchus, Pausanias, albeit Pausanias may be counted rather a private person, than a publick soldier. And of Alcibiades, will I tell downe, what I finde.

[illegible]

perour I raise,

2. *Aeneas* perfected the Theory. *Aeneas* is mentioned by *Polybius* in his 10. book, where he discusseſt ſeveral ſignes to be made by beacons of fire, in caſe an enemy approacheth to the port of the Country. His books were intituled Commentaries of the ſituation of a General. *Polybius* ſaith, & *Ælian* here calleth them books of the office of a General, the title being all one in effect. Of theſe books none have reached to our age, but one alone, which compriseth precepts of defending a towne beſieged, & ſome 5 or 6 years agoe came firſt to light, & praiſe: that worthy man *Iſaac Caſaubon*, the learned ornament of this Country, (and of England ſo long, as he lived there) being the ſetter forth. And it is adioyned to his edition of *Polybius*. Theſe books Tactick of *Aeneas* were abridged (as *Ælian* ſaith) by,

3. *Plutarchin the life of Pyrrhus tells us what Cy-
reneans said of him.* There was, faith hee, in the Court of Pyrrhus a Theſſalian, a man of
great vnderſtanding: & whoe having heard the orator Demotheſtes, ſeemed
alone of all, that then were eſteemed eloquent, to renewe in the memory of
the hearers an image & ſhadowe of the vehemencie & vigor of his vtrance.
Pyrrhus held him in his Court, and made vie of him, in ſending him in embaf-
ſages to people and Cities. In which embafſages hee confirmed the ſaies of
Euripides.

*What ever force can doe, with trenchant swoordes:
The same, or more, is wrought by pleasing wordes.*

Therefore was Pyrrhus wont to say, that Cyneas had gayned more Cities
with his eloquence, then himselfe with armes. By occasion whereof he did
him

him great honor, & employed him in his principal affairs. * *Tully* *speaker* of his
works: your letters, (faith he) to *Papyrus* *Parus* have made me a great Gene-
rall: I was altogether ignorant of your great skill in military matters. I see
you have read the books of *Pyrrhus* & *Cynaes* & have some fewshipes in a readinesse v^o the
counsell: this yet more, and I have a better armour against *Parthian* horsemen. But
why sport wee? you knowe not, with what a *Generall* you haue to doe, I haue
in this my gouernment not fully in practise expreſſed *Xenophons* institution of
Cyrus: which before I had worne a peece with reading, *Pyrrhus* & *Cynaes*, the
names, but two principall authors of warlike discipline: And where he addeth *Xenophon*,
where, though he be not named by *Helian* amongst the 7 aduicewriters, deserueth yet to
be pretermitted, hauing been both a great Commander, & besides writte large set of mi-
litary matters, whose works alſe are now extant; let vs see, what be faith of him in another
place. * *Cyrus*, faith he, is written by *Xenophon*, not according to the truth
an history, but for a patterne of iust gouernement. Whose wondrous equi-
ty is by that *Philoporus* matched with singular *Curtius*, whose bookes our A-
fricanus, (and that not without cause) was neuer wont to let goe out of his
hands, And of Africanus he reporteth the like in his. * *he* *C. of ENRIQUES* was of *Aun-*

a Cicero, epist. ad Atticum lib. 9. epist. 10.
b *Heliodorus, lib. 1. cap. 1.*
c *Tulius, quest. lib. 2. tit. 14.*

[illegible][illegible]

Plutarch. An [E]vangelus] Plutarch dis[co]ursing of the studies of Philopomenus
 in effect: He took no delight to heare all kinde of discourses, nor to read
 books of Philosophy, but such onely, as might profit to the daylie exercise
 of vertue, And hee read not willingly other p[er]allages of Homer, than such
 thought had some efficacy to moue a mans hart to prowes, & to conquest,
 and about other readings, he specially affected the Tactics of Eueangelus: & like
 the histories of the exploits of Alexander the great. This is all I find of the
 studies of Philopomenus. I gesse notwithstanding, he was a choice auitor, because Philopomenus
 had him in such esteeme, of whom the same Plutarch writeth, That Greece
 bore him singular affection, as the last vertuous man, which hee brought
 forth

a Cicero, *epist.
familiac. lib. 9
epistol. 11.*

f b Epistola ad Q.
fiat lib. i. epi. i.

e Tusc. quest.
lib. 3. 145.

3. **Not a known dead**

lib. \$ 87. x.
c Plur in Pyrrh

te f Phurarch, in
Pyrrho.

al, g Plutarch, i
Pyrho.

may be left lib 18

be. 615 A.
i Lib. 25, 68
k Plur. in 5

E. rho.
1 Justin. lib.

this Dipnoceph. la
73. R.

of Plutarch
Philopomen

fourth in her ould age, after so many great, and renowned Captaines of ancient time; and alwayes augmented his power, and authority, as his glory encreased. In which respect a Roman, praising him, called him the last Grecian; meaning that after him Greece bred noe great, nor any personage in deed worthy of her.

7 And Polybius ^a It is the same Polybius, whose History, so much as is extant, that excellent learned man Isaac Casaubon translated into Latin, and set forth 1609. For his life and worth refer to the preface of the same Casaubon to Polybius his history. Hee had been in Achaia, his owne country, Generall of the horse. Afterward being in displeasure with the Romans, hee lived long in prison at Rome: and was for his worth finally released by intercession of the greatest men of Rome: and became companion to Scipio Africanus the younger, with whom also hee was at the siege and destruction of Carthage. His Tacticks, wherof Ælian speaketh, are perished with other of his workes. Yet are there many passages dispersed here, and there in his history, which argue his extraordinary skill in matters of warre. And it may seeme, that Ælian hath taken much from him both for matter, and wordes.

8 Iphicrates ^b Whose will reade of Iphicrates, let him goe to ^c *Emilius Probus*, that writeth his life. His actes are also declared by Xenophon, and Diodorus Siculus, and Polyan, and Iustin and diuers others, as they were incident to their generall histories. Hee was esteemed one of the best Generalls of his time: and was called out by name by Darius King of Persia to be generall of the Grecians, his mercenaries, in the warre, hee had against the Egyptians: His fame and estimation was so great with Alexander the great, that when his sonne, (whose name was also Iphicrates) with other Grecians were taken prisoners by him, for that they came embassadors into Persia to Darius, hee not onely spared him for the loue of the City of Athens, and for the remembrance of his fathers glory ^d the wordes of Arrian) but held him about him in honour so long, as hee liued, and after his decesse sent his reliques to Athens, to be interred by his friendes, and kinsfolke.

9 Posidonius the Stoick ^e Posidonius in his time was a Philosopher of high renowne, and of the sect, that were called Stoicks. Tully citeth him often in his workes. In the second booke of Tusculan questions hee recounteth, that Pompey the great, on a time comming to Rhodes, was desirous to heare him. But understanding hee was extreame sick of the goutte, hee forbore not notwithstanding to visit him being a most noble philosopher: whome after hee had seene, and saluted, and used with honorable wordes, and told him, hee was forye, hee could not heare him discourse, you may, if you please, quoth Posidonius: and I will not suffer paine to be cause, that so great a man seeke mee in vaine. Then, as hee lay in his bed, began hee gravely, and copiously, to dispute, that nothing was good, but that, which was honest. And when firebrands, as it were, of torment towched him to the quick amidst his disputation, hee broke forth often into these wordes: *Sorrow, all this is nothing: T thought thou trouble me neuer so much, I will not yet confesse, that thou art of thy selfe evil.* So Tully. ^f *Pliny likewise telleth*, that Pompey, after the warre of Mithridates, going into the howse of Posidonius, a man famous in Philosophy, forbid his seruants to knock at the doore (as the manner was), and the seruants bundles of rods (as *saith* hee) were submitted to a doore by him, to whom East & West had submitted themselves. *The same* ^g *Tully attributeth to this Posidonius the invention of a Sphere*, whose particular conversions did worke the same in sonne & moone, and the other fixe planets, that is wrought by the motion of heauen euery day and night.

The

The preparation of warlike forces and division of them, and how they are armed.

CHAP. II.

I will then beginne with such ^a preparations as are absolutely necessary for service in warre, the forces wherof consist of two sortes, the one Land forces, the other ship forces. Land forces are such, as fight on land: Ship forces such, as are ordered for fight in shippes vpon Sea, or Rivers. But the order of Sea service I will referre for another place, and in treat now of things pertaining to Land service. The levies then for Land service are either of those, that fight, and of mannage. *Arms*, or else of those that fight not, but remaine in the campe for necessary uses. They fight that stand ordered in battaile, and with armes [assault or] repulse the enemy. The rest fight not, as Phisitians, merchants, servants, and other, which follow the campe to minister vnto it. Such as fight, are either footemen, or Riders: footemen properly, that serue on foote. Of Riders, some vse Horses some Elephants. They, that vse Horses, are caryed either one Horse-back, or else in Chariots. And these are the differences in generall. But in speciall the foote, and Horse receaue many other diuisions; onely the Elephants, and Chariots, neuer varie. Footemen then are reparted into three kinds, one being Armed, another Targetters, the third light, or naked. ^b The Armed beare the heaviest furniture of all footemen vsing according to the Macedonian manner large, round, Targets, and ^c long Pikes: ^d The Light contrarywise beare the lightest, having neither Curace, nor Greue, nor longe, or round Targets of any weight, but ^e slieng weapons onelies ^f *Arrows*, ^g *Darts*, ^h *Stones* either for hand, or sling. To this kind is referred the ⁱ armour of the Argilos, who hath his furniture like to the Macedonian, but something much shorter, then the Macedonian Pike: which manner of arming seemeth a meane betwixt the light, or naked, and that which is properly called heauie: as being lighter, then the heauie, and heavier, then the light: and that is the cause, that many place it amongst the light.

The forces of Horse (which wee distinguished before from Chariots) as being ordered in Troopes, are either ^a Cataphracts, or not Cataphracts. They are Cataphracts, that cover their owne, and their horses bodies all over with armour. Of not Cataphracts, some are Lancers, some Acrobolists, ^b Lancers are such as joyne with the enemy, and fight hand to hand with the Launce on horseback. Of these, some beare longe Targets, and are there vpon called Targetters: Other some Launces alone without Targets, who are properly called ^c Lancers, and of some ^d Xanthophori. ^e Acrobolists on horseback are such as fight a farre of with slieng weapons. Of these, some vse darts, some bowes. They vse darts, whome wee call ^f *Tarentines*. Of Tarentines, there are two sort's: for some throw little ^g darts a farre, and are termed ^h *Darters* on horseback, but properly ⁱ *Tarentines*, others vse light darts, and ^j after they haue spent one or two, close presently with the enemy like the ^k *Lancers*, which wee

^a *Emilius Probus* in vita Iphicrates. Xenophon. Hystor. grecic. lib. 2. c. 18. ^b *Diodorus Siculus* lib. 15. ^c *Polyan* lib. 2. c. 10. ^d *Arrian* lib. 2. c. 10. ^e *Arrian* lib. 2. c. 10. ^f *Arrian* lib. 2. c. 10. ^g *Arrian* lib. 2. c. 10. ^h *Arrian* lib. 2. c. 10. ⁱ *Arrian* lib. 2. c. 10. ^j *Arrian* lib. 2. c. 10. ^k *Arrian* lib. 2. c. 10.

^b *Arrian* lib. 2. c. 10.

^c *Arrian* lib. 2. c. 10.

^d *Arrian* lib. 2. c. 10.

^e *Arrian* lib. 2. c. 10.

The Tactics

wee speake of, and fight hand to hand. These in common speech are named light horsemen. So that of Tarentines some are properly called Tarentines, whose manner is to dart a far of. Some light horsemen, who joyned, and fight hand to hand. ²⁰ The horsemen that use bowes are termed Archers on Horseback, and of some Scythians.

These then are the differences of such as are in the Campe, the kinds of Souldiers being in number nyne: Of footmen, armed, Targetiers, Light armed, unarmed: Of horsemen Lanciers, Darters, Archers, Cataphracts: And lastlie Chariots, and Elephants.

Notes.

IN this Chapter the kinds of Souldiers are distinguished according to their severall armes borne in fight. And therefore of foote some are called armed, because they beare heavy armes, other light-armed or naked, because they wear no defensive armes, other some Targetiers, because their chief defence rested in a slight target, wherewith they covered their bodies. The horse also have their appellation, as their armes are. And some are Cataphracts, because themselves & horses were armed compleatly, other Lanciers, for that they used a lance: other some Acrobolists, by reason they fought with stinging weapons a farre off. The first thoughts of a Prince, or State, that is resolved to put an army into the field, ought to be to provide armes. Armes are the security of their own souldiers, the terror of the enemy, the assured or dinary meane of victory. The antiquity of armes is all one with the beginning of warre. For when of ancient time mighty men puffed up with pride, and led by ambition, fought by violence to enlarge their empire, and to bring under subjection their bordering neighbours, they were enforced to flye to the invention of armes, without which no victory could be obtained. Since, armes have been taken up for defence also, necessity, the mother of arts, inventing a meane to withstand ambition. As Analcidas well objected to Agessians being wounded by the Thebans, you are well rewarded for your labour, quoth hee, since you would needs teach the Thebans to fight, that had neither will, nor skill to do so. For the Thebans being put to necessity of defence grewe warlike through many invasions of the Lacedemonians, saith Plutarch. Whoe were the inventors of the severall pieces of armour, and of the divers kinds of weapons used in old time, may appear by the relation of Pliny in his natural history. This is certeyne, that the most warlike nations, and most victorious have alwayes sought to have advantage of their enemies by advantage of armes. The end of armes is either to defend, or assault. Hence are armes divided into two kinds: Defensive, and Offensive. Defensive are those, which are worne to resist the force, and charge of the enemy. Of this sort are the head-piece, gorget, curace, vambrace, gauntlets, calves, greaves, and target. For whereas there are eleven partes in man, the woundes of any of which bring with the undoubted death (as some Authors write) the braines, the two temples, the throat, the breast, the belly, the two muscles above the two elbows, the other two above the knees, & the privy members pierced with a thrust: the head-piece for each for the defence of the braine, and temples, the gorget for the throat, the curace for the breast, the vambrace for the muscles of the armes, the calves for the privities & belly, the greaves for the muscles above the knees, and the target for further assurance of the whole body, being moveable against all strokes, and profers of the assailants. Offensive armes are such, as men endeavour to wound, or kill withall: as stinging weapons of all kinds, arrows, stones out of slings, or the hand sword.

swordes, pikes, partizans, javelins, and the like. But as defence, and security of a mans self is more agreeable to nature, then to hurt an enemy, so are the defensive armes preferred before the offensive, in that they bring safety to him, that beareth them, where as the other are employed in annoying the enemy only. The Poets sett forth their bravest and valiantest men alwayes best armed for defence. So Achilles in Homer, and Aeneas in Virgil, are armed to point with armes wrought by Vulcan, to the end to remaine untouched amidst the stormes of their enemies weapons. The Grecian Lawgivers punished that souldier, that in fight cast away his target: not him, that lost his sword or pike.

Plutarch writeth, that at such time as Spaminondas assaulted Sparta (the most warlike City of Greece) there was in the City a Spartan named Iridas, who was the sonne of P habidas, but that surprised the Castle of Thebes called Cadmea, and thereby stirred up the warre betwixt the Thebans, and Lacedemonians, & ruined the principality of the Lacedemonians in Greece. This man being in the flower of his age, and personable, and large of lymmes, ranne forth of his house all naked, his body adorned with oyle, without apparile or armes, except a sword in one hand, & a javelin in the other, and breaking through the throng of those, that fought on his side, came to handes with the enemy, and overthrowing some, and killing other some, continued the fight, till the enemy was repulsed, and at last returned into the City without wound. The chief magistrate understanding hereof rewarded him with a Crowne for his valor, but yet fined him at a hundred drachmes, for that he durst venter to fight without armes defensive, iudging it a matter almost impossible, that a naked man should escape with life fighting against the arma. Andes of so many valiant enemies, as the Thebans were.

In armes was required, that they should be strong, that they should be fitt, that they should be comely; strong to protect, or annoy, fitt to sitte close to the body and be manageable, comely to grace him, that beareth them. That defensive armes ought to be strong, may be shewed by the end of armes; which is to save himself against arrows, darts, and other offensive armes of the enemy. If the fute of his end, they are of no use; it being better to be unarmed, then carry armes, that will not defend. Without armes you have the body free, and at liberty: carrying armes, though never so light, they must bee a cumber to you, and some what hinder the motion of your body. Armes therefore ought to be sufficient to resist the weapons of the enemy. The inconvenience of defective and weak armes is well noted by Vegetius. From the building of the City of Rome, saith hee, till the time of the Emperour Gratian, the foote armed their bodies with Cataphracts, and head-pieces. But when field exercise through negligence and sloth was given over, armour began to growe heavy, because it was seldome put on. They made fute therefore to the Emperour first, that they might leaue of their Cataphracts, then, their headpieces. So our souldiers encountering with the Gothes, were oftentimes wholly defeated and slaine by the multitude of their arrowes. And a litle after: so cometh it to passe, saith he, that they, whose without armes, are exposed in the battaile to woundes, thinke not so much of fight, as of running away. Yet must wee not imagine, that those souldiers fought in their ordinary apparile only: I incline rather to the opinion of Stevechix, whose holdeth, that they took themselves to their military coates, called in Notitia vtrique, Thoracmachia: and to their Targets. This Thoracmachia was a garment invented long before Gratianns time, and worne under the armour of the souldiers, and was a kind of fute, but being reprofed against arrowes, and their targets not sufficient to cover their heads, and whole bodies from arrowes, they wore phoxius to the front of the Gothes, and received those overbrowes, Vegetius speaketh of.

B

The

^a Plut. in Ptolema.

^b Pherecr. in Agelliao.

^c Drachma habet in it q. obolus
that is about 40
as being
but 16 xlib.
145-424.

^e Vegetius lib. 1
cap. 10.
Cataphracti in
the most and full
armor of the
force. Hereafter
wee shall see
what that armor
is.

^f Stevechix in
Vegetian pag. 8.
e Notitia vtrique
de Occident. in fine.

^a Plutarch in A-
gelliao.
^b Plut. natural
historia lib. 7. c. 56.

^c Plut. in A-
gelliao.
^d Pag. 17.

part of a fouldiers body, being so fitly made & borne, that need requiring, they could throw down their burdens, & use their ready armes in fight, as the members of other bodies. *Tet must care be had, that their weight exceed not the strength of him, that beareth them. For wine will be apt to continue long in fight, that beside the labour of fight, is charged with a burden more, then he can well beare. The proofe is plain in beasts, which how strong soever they be, faint & tire vnder too much weight. Ailian offers, asking of the length of pikes, giueth this rule, that they bee not longer then a mans may well use, & wield in handling. To much length maketh them to be heavy, & vnsuited to be managed, whereby they rest vnprofitable to offend the enemy. In this propriety of fineness those armes & weapons are comprehended, which are of most use in the field. For as in all other artes things of greatest effect are alwayes preferred so is it in warre. There is great advantage in armes, which is the cause that one kinde hath been preferred before another. Amilius Probus giueth an honorable testimony of skill in matters of warre to Iphicrates, of whom he writeth thus. Iphicrates the Athenian invented many things in warre. Hee changed the armes of the foote. For whereas before they used great targets, short pikes, & little swordes, he gaue them little round targets, called Pelte, that they might be fitter for motions, & encounters, and doubled the life of their pikes, & made their swordes longer. Hee likewise changed their Curaces, & in steed of iron, & brasse, brought in other wrought of linen, where by he made them nimble at all assays. For lessening the weight, hee brought to passe, that they as much covered the body, and yet were very light, and fitter for use. Of these targets, which Iphicrates invented, the names of Pelian (Targets) sprong: of whom wee shall heare more in this chapter. And yet wee must not heretofore conclude that Iphicrates changed all the armed foote into Targetiers, for the Athenians had still their armed, notwithstanding this invention of Targetiers, as Xenophon testifieth, but where as the Athenians before had noe targetiers of their owne people, (as I conjecture) Iphicrates brought in this kind of armour: & so of the armed, hee made some targetiers, & left the rest to the armes, they bore before: iudging it more profitable to haue both Targetiers, & Armed of their owne people, then armed alone. Philomen also the brasse Achaean Generall taught his Countrymen in steed of longe targets & Targeties to take around targets (called Alpis) & a pike after the Macedonian manner, and to arme themselves with head-pieces, Curaces, & greues, and to fettle themselves to a stand, and firme kind of fight, in lieu of confusion, and pelliticall encounters, and by this means brought the to be almost, & brasse fouldiers, & victorious in their fights against their enemies. Polybius, describing of the Gauls, & Spanish swordes of ancient time, saith, that the Gauls sword was so fashioned, that it serued onely to strike with, and but for one stroke: after which it bowed both in length & breadth, that vnslesse the point were rested vpon the ground, & the blade rightened, you could not strike with it the second time. But the Spanish sword was both for thrust & stroke, having a strong point, & a fisse & sure edge to strike withal on either side by reason of the firmnesse of the blade. This difference the Romans espied, and being excellent imitators of all things, which were best for use (though they were enemies from whom they tooke them,) made choice of the Spanish swordes, & after Annibals time caused their foote to use no other. Souldiers witnesseth thus. The Spaniards, saith he, in forme of swordes farre excell all other nations. For their swordes both haue a strong point, and an edge on either side, that entrench deep in striking. Which caused the Romans, to lay downe their owne country swordes, and take the Spanish forme from them, that followed Annibal. The forme they took, but the goodnesse of the metall, & exactnesse of the temper they*

a Ailian cap. 13

b Aemil probus in
Iphicrates & Annib.
Bell. lib. 15. cap. 45c Xenophon hist.
Graec. lib. 2. cap. 10d Plutarch in Philo-
pote. lib. 1. cap. 10
(sub Aristarchus)e Polybius lib. 6
cap. 10. lib. 6
cap. 10. lib. 6f Suidas in meta-
morph.

they could never attein vnto. The Romans then rejected the french swordes, as of small use, & imitated the Spanish, because they were fitter for service. Xenophon describing the nations, which followed Cræsus against Cyrus, their manner of arming, and order in battail, & tellth of the Egyptians, that they were armed with targets reaching downe to their feet, with long pikes, & with swordes, which they call Copides, & for order, stood a hand-bread in depth, & bringeth in Cyrus describing this manner of arming, and order, to his souldiers, saying they were alike armed, a little embattailed. For their targets, said he, are greater then is fite for action, & for fight, & being ranged a hundred deep, it is vnusif, they will hinder one another in fight, except a few. Annibal, after his first victory against the Romans, armed his Africans, (his best & most trusty souldiers) with the armour of the flaine Romans, because he found it better, then his owne, & Perrihus used not onely the armour, but the Italian souldiers also, & ranged them a cohort, & a Metarchy, after a strictly one by another. And Mithridates after his experience in his first wars with the Romans, that a well in arming, as in manner of fight, they excelled all other nations, left the arming of his owne Country, & brought in the Roman sword, & target, & reduced all as neuer as hee could vnto their discipline. So then strength & finenesse are required in armes. To this is comelinsse adioyned. The shield of Achilles how was it bewitched with pictures & Stories by Vulcan: and that of Æneas, coming out of the same forge, how glorious was it: To say nothing of the brasse armes of Hector, Agamemnon, Diomedes, Glauco, Turnus, Mezentius, & other. Alexanders armes were very rich. He had a Sicilian Caske, & a double lined Curace the spoile of Illos: his headpiece was of iron, & lined like pure filver, the work of Theophilus, about his necke was an iron gorget beset with precious stones. A sword hee had of wonderful temper & lightnesse, the gift of the Cician King. Hee wore a baudricke of prowder worke, then the rest of his armour, the work of the elder Elicon, & the honour of the Rhodian City. Cyrus the elder, that lived before Alex. time, had armes provided by his Grandfather Asyages both very faire, & fite for his body. A Bradates the Sufian king had his headpiece of gold, & vambraces, and bracelets about his wrists, & a purple Coate, and a plume of hyacinthine feathers. Neither did this bravery rest amongst the Princes alone. The souldiers of Cyrus were furnished with the same armes, that Cyrus himselfe bore, with scarlet coates, Curaces of brasse, brasse helmets, white plumes, swordes, & eury one a darte. They differed onely in this that their armes were guided, Cyrus his armes shined, & had a reflexion, as it were, a looking glasse. And Alexander, hearing of the riche armour, the Indians bore, to make his owne fouldiers equall with the in bravery, whom they exceeded in valor, caused their targets to be plated over with siluer (whereof they were after called Argaspidæ) & their horse-bittes to be made of gold, & adorned their Curaces, some with siluer, other with gold. Thus might some piques, & superiority in a young King, were it not that the likes was done by other the greatest Generals of ancient times. Cæsar may serue for an example for al, whose fouldiers how gallant and brasse they were, Plutarch testifieth in his life. The Romans otherwise much addicted to frugality, allowed yet liberally ornaments to the honouring of worthy souldiers, rewarding them for their service, & with rich appoyles for horses, chaines of gold, bracelets, crownes of gold, & other honors, which they wore on onely in the field, but at all other solemnities & meetings in the City. And for every common souldier they provided plumes of purple, or blacke feathers, every one of a cubit long, of which plumes Polybius giueth this iudgement: Plumies, saith hee, being added to the rest of the armour maketh a fouldier seeme twice as great, as hee is; and beside the faire shew, they make, they are terrible to the enemy in fight. A man may seeme as light, as a feather, that discouerseth plumes, & fetcheth ornaments from feathers.

a Xenophon Cyrop.
lib. 1. cap. 10
Copides were
swords a cubit
long as the
penultima fibres
Curtius lib. 2. cap. 10c Plutarch in La-
cullo

d Plutarch Alex.

e Xenophon Cyrop.
lib. 1. cap. 10
lib. 1. cap. 10f Xenophon Cyrop.
lib. 1. cap. 10g Curtius lib. 2
cap. 10h Plutarch in
Cæsari Plinius hist. nat.
lib. 9. cap. 10
lib. 9. cap. 10

It may I truly affirme, that the use of plumes is very ancient, & that the Romans borrowed it from the Grecians, and the Grecians from the Carians, who were the first inventors of them. As much is testified by Polyenus: He saith that Temesthes King of Egypt going to the oracle of Ammon about the state of his kingdom, had answer to beware & take heed of Cocks. Pammenichus, that sought the kingdom, had Pigeons a Carian to one of his familiar friends, & learning of him, that the Carians were the first that used Plumes to their helmets, & ever then continued the use of them, & considering that the meaning of the Oracle was not of Cocks, but of men, that wearing some ornament on their heads, had a resemblance of Cocks, waved a multitude of Carians against Temesthes, by whose help he overthrew Temesthes in battaile, & possessed himself of the crown of Egypt. Now for the true end of souldiers ornaments I will only add one example. Philopomen the Achaean in reforming the alms crept into the Achaean State with great judgement (I will use the words of Plutarch,) reduced to order their delicacies & superfluities. It was not possible quite to take away the sickness of vain & idle desires, wherewith they had of long time been possessed, delighting in excess of appaile, in riche dyes of coverlets, & carpets, striving one with another, whose should be most sumptuous in bankets & feasting. But by little & little beginning to turne their thoughts from vnnecessary expences to a love of comelineffe in thinges, that were profitable & honest, he brought them at last to leaue the expences of the body, & to shew themselves gallant, & braue, in soldiery, & warlike furniture. A man might therefore haue seene the shoppes full of silver and golden cuppes cutte a peeces, of curaces gilded with gold, of silvered targets, and bittes; the places of exercise fraught with colts then first backed for service, & with yong gallies managing their aumes; & in the hands of women head-pieces adorned with divers-coloured trynnings, horsemens coates, and souldiers cloakes curiously embellished with flowers. For the very sight of these things both encrease the Spirit, & stirreth up desire, & engend'reth an undaunted boldnesse, and alacrity to dangers. In other shewes to much lavishing bringeth in effeminate nesse, & worketh a remissnesse of minde, the sence with vaine pleatings and ticklings subverting, as it were, the vigor and force of the vnderstanding. But in these the Spirits are much heighthened, and exalted. As Homer bringeth in Achilles at the very sight of his newe armour ravished and inflamed with a desire to bee doing with it. Thus garnishing the youth hee exercised & hardened them to labour and warlike motions, making them thereby to vndergoe with desire whatsoever they were commaunded. So farre Plutarch. Out of whose opinion it followeth, that Bravery of armes raiseth the spirits, stirreth up desire to fight, maketh the souldier bold, and cherefull to perils, and as Polybius holdeth please the sight, encrease the stature in shewe, and is a terror to the enemy. Yet ought there therein a meane to be sought, & rather an assurance followed, then vaine gazing and ostentation. Antiochus being to fight with the Romans gathered a mighty army together. And seeing them glitter with gold and silver, and with all excess of bravery, as the manner of the Asiaticall people was, tooke so great delight therein himself, that calling Anniball unto him, hee shewed his troopes, and demanded, if hee thought not that Army sufficient for the Romans: yes quoth Anniball, though they were the most covetous people in the world. Anniball with good reason derided the vaine shewe fitter for a maske, then a field, which hee assured himselfe, would fall into the Romans hands to be spoile. Antiochus committed the like error in his first warre against the Romans. For as Sophistres are wont for the most parte, saith Plutarch, hee was in the beginning vaine glorious, and conceited by provide warring against the Romans with weake forces, but yet sette out with pompe, and

a Pharaoh in
Escalio.

a Herod. lib. 14.
b Polyen. lib. 7.
c Pamenichus. 11.

d Plu in Philom.
e Polyb. lib. 2. cap. 50.

bravery to the outward view: But being foiled to his shame, and weighing in his minde, he must take vp second armes against them, he fought to reduce his forces to a true kinde of arming, & fitt for the service, he intended. Reiecting therefore multitudes, and confuted threatnings of barbarians, and furnitures of armes gilded, and sette with precious stones, as being a pray for the conqueror, and noe assurance for him, that wears them, hee brought in the Roman sword, and caused long heavy targets to bee framed, and choise horses, rather than warre already managed, and made fitt for service, then those, that were richly trapped and garnished. So farre Plutarch. The souldiers care therefore ought to bee first for surenesse, then for himselfe, lastly for comelineffe and ornament in armes. If the two first fail, the last availeth little, and will prove rather a burden, then a defence. And thus much of armes in general: Nowe followe the particulars of armes, as they are in Aelian.

I Preparations absolutely necessary for warre] The preparations, whereof Aelian speaketh, are so necessary, that without them no warre can be made or continued. For purposing to fight by water you must have shippes, by land, you must have foote, and horse. For which, if you provide noe armes, you put them into the field not to fight, but to bee slaughtered. The manner of fight in the field is not of one sort. Some time celerity is needfull, to attempt or prevent the enemy: sometime a slowe and sure proceeding, left, with to much hast, wee be overtaken our selves. Therefore the divers arming of souldiers, ought to be such, that they may serve for all occasions, and uses, and that wee may employ alwayes to service such, as by reason of their armour, shall most fitt our purpose. Wherefore, Iaphigates fittly resembled an army to a mans body, calling the heavy armed the body, the light armed the hands, the horse the feete, and the Generall the head: and as if any of the rest were wanting, the army should bee lame, and halted. So if there want a Generall, it is unprofitable, and of noe use. The heavy armed are the body, which give life and foode, as it were, to the rest, and to which the rest being distressed, retire. The light armed are the hands, which uppon every occasion bring put out to grype and take hold upon the enemy, are drawn in againe, when it is expedient. The horse, as feet move with celerity: the Generall is the head, that ruleth, that watcheth, that careth for the rest, directeth the times of their motion, and of their rest. So then the whole force of the field consisteth of horse, and foote. And the foote are reparted into three kinds.

I Armed, Targetiers and light armed] These severall kinds of souldiers were of divers all the Grecians especially by the Athenians, Lacedamonians, and Thebans, whose were the mightiest, and the most warlike people of Greece. Alexander had them in his army against Darius. When Alexander, saith Arrian, came to the place, where Cyrus (with whom Xenophon was) encamped, and sawe the streights of Cilicia possed with a strong garrd, hee left Parmenio with the heavy armed, to stay behind, himselfe about the first watch taking with him the Hypaspides, archiers, and Agrians, marched on toward the streights in the night. The armed were left with Parmenio, himselfe took with him the Hypaspides (targetiers) archiers, and Agrians. These Arians were darters on foote. The like it is to be found in divers other places of Arrian. Pyrrhus also, that followed the Macedonian manner in arming his souldiers, had the same division of armes. And Philip King of Macedony sonne of Demetrius. And Antiochus, that warred against the Romans.

2 The armed beare the heaviest furniture] This heavy furniture appeareth not by description of the armes, which Aelian giveth them: which are a Macedonian target,

B 4

a Plutarch in
Polyb. lib. 2.
b Arrian. lib. 1.
c Polyb. lib. 2.
d Arrian. lib. 1.
e Polyb. lib. 2.

f Thucyd. lib. 2.
g Polyb. lib. 2.

h Arrian. lib. 1.
i Polyb. lib. 2.
k Polyb. lib. 2.
l Polyb. lib. 2.

a Accutill Pro-
bat. in vita 27th
cra.

a Xenoph. Cyr.
lib. 7. 12. A
b Xenoph. Cyr.
lib. 7. 12. A
c Xenoph. Cyr.
lib. 7. 12. A

e Xenoph. in Pto-
c. 6. 6. 6. 6.

G. Xenoph. in Pto-
c. 6. 6. 6. 6.

d Xenoph. in Pto-
c. 6. 6. 6. 6.

e Xenoph. in Pto-
c. 6. 6. 6. 6.

f Xenoph. in Pto-
c. 6. 6. 6. 6.

g Xenoph. in Pto-
c. 6. 6. 6. 6.

h Xenoph. in Pto-
c. 6. 6. 6. 6.

i Xenoph. in Pto-
c. 6. 6. 6. 6.

j Xenoph. in Pto-
c. 6. 6. 6. 6.

k Xenoph. in Pto-
c. 6. 6. 6. 6.

l Xenoph. in Pto-
c. 6. 6. 6. 6.

m Xenoph. in Pto-
c. 6. 6. 6. 6.

n Xenoph. in Pto-
c. 6. 6. 6. 6.

o Xenoph. in Pto-
c. 6. 6. 6. 6.

p Xenoph. in Pto-
c. 6. 6. 6. 6.

q Xenoph. in Pto-
c. 6. 6. 6. 6.

r Xenoph. in Pto-
c. 6. 6. 6. 6.

s Xenoph. in Pto-
c. 6. 6. 6. 6.

t Xenoph. in Pto-
c. 6. 6. 6. 6.

u Xenoph. in Pto-
c. 6. 6. 6. 6.

v Xenoph. in Pto-
c. 6. 6. 6. 6.

w Xenoph. in Pto-
c. 6. 6. 6. 6.

x Xenoph. in Pto-
c. 6. 6. 6. 6.

y Xenoph. in Pto-
c. 6. 6. 6. 6.

z Xenoph. in Pto-
c. 6. 6. 6. 6.

target, and a pike only. *Pharates*, besides the target (lesse, then the Macedonian target) which he armed his targetter withall, gave him both a pike & a linen curace. So that if the Macedonian armed bore not more then a Target and a pike, his armes should be lighter, then *Pharates* his Targetter, who had a target, a pike, & a linen Curace. It hath bene the manner of some Nations to beare targets alone without Curaces. So did the Egyptians in *Xenophon*: So the Gauls in *Pausanias*. There are againe, that have borne Curaces without Targets: as *Phorcys* the Phrygian in *Homer*: of which kinde of Curace, because it some what resembled the Curaces of our time, I will reherse the description out of *Pausanias*. There lay vpon the aulter, *saith hee*, a brasse Curace, the forme whereof agreeth not with the vse of our times, but of old it was common. It had two plates of brasse, one fitt for the breast and the belly, the other to cover the backe. That before was called *gydon* (the hollow part) that beynd *Prasagon* (because it was added to the gydon). They were fastened together with buttens behinde. It seemeth to bee a sufficient defence for a mans body without a Target. Therefore *Homer* maketh *Phorcys* the Phrygian to fight without a target, because he wore such a Curace. But yet, that it was not the manner of the Macedonian armed to beare pike & target alone, may be plaied many wayes. First a pikeneth them headpieces, & greues, and targets, and pikes. Then doubt I not but they were as well armed as the rest of the Gracians, within whose Panoplia Curaces, a target, & a headpiece. Now that the Macedonians had also their Panoplia full or compleate arming is to be found in *Diod. Siculus*. Where also *Choragus* the Macedonian (whom *Q. Curtius* calleth *Horatas*) is said in the fight betwixt him & *Dioxippus* to be fully armed. *Leo* describeth the Panoplia of the Macedonians after this manner. Alexander, *saith hee*, armed his Macedonians with a large target, a sword, a head-piece, greues, vambraces, and a long pike. *Philopamen* (as is before reherced) reducing his Achaeans to the Macedonian arming, brought them Curaces, headpieces & greues. The names also, that are attributed to the Armed, shew they were otherwise armed. *Plutarch* calleth them *Phrygians*, & *Cathartes* as having their bodies all armed & opposeth them to *Fracon* light or naked: And by *Vegetius*, the armour is self named *Cataphracta*, because the whole body is covered therewith. *Xenophon* termeth them *scaphoras* & *ring Curaces*. These are the strength of the battaie & a strong wall, or rather a fortress of the field, to whom the light-armed, and the horse also retire in time of need. As long as they stand the field is not lost, being defended the rest can make no resistance. Being armed with a single target without other armes, they incur the same danger, that the Romans in *Gracian* time did, whoe for want of Curaces were entirely destroyed with the arrows of the Cathes. Wherefore, it seemeth, a *Lian* heer pointeth at the principall armes onely of the armed Macedonian, For after ward disowling of the light-armed, he saith, they neither had Curace, nor greue, nor long or round target: implying thereby, that the armed had them all. So *Livy*, comparing the armes of the Romans and Macedonians together, saith not more, then, that the Macedonians were armed with a round target and a pike, the Romans with a long target, and a dart, called *Pilum*; when himself had before declared, they had headpieces, Curaces, and greues.

3 Vnto targets after the Macedonian manner. Targets were of two sortes, round targets, and longe targets. Long targets were called *Thureo*, and were in forme like a dore, from whence they had the name. For *Thura* significth a dore. These the Romans, and Gauls called, albeit some what different in forme. The round had eight full handfull in diameter, as a *Lian* saith, and were termed *Asides*. Long targets were much disliked by the Gracians. *Cyrus* in *Xenophon* derideth them

as both hindring the fight, & being conuicely, & *Philopamen* changed them into round targets following the Macedonian manner. The targets of *Philopamen* *Pausanias* termeth *Argelian* targets. It may be because they were first used by the Argues in the battaie betwixt *Argisius* *Danaes* father, and *Perisus*, who contended about the kingdom of *Argos*.

Of what matter these targets were, is a question. Some take them to have bene made of other matter, & covered over with brasse: & that otherwise the souldier should not have bene able to beare born the weight. I deny not, that in ancient time some targets were plated with brasse: the rather, because I find, that *Alexander* to match the *Indian* pompe covered the targets of his souldiers with plates of silver. But, that the ordinary Macedonian target was so covered, I deny. *Alian* after calleth them *chalee* (brasse) not epichalee (covered with brasse). *Polyb. saith*, that the Macedonians in the time of *P. Philip* the sonne of *Aemilius* were called *Chalcapides* (brasse targetters) not epichalcites, in which name, as *Hesychius* hath, they were called, that had their targets covered with brasse. So like wise in the time of *Perses*. And the *Megasthenes*, whoe imitated the Macedonian manner of arming, as termed *Chalcapides* in *Polyb.* I haue shewed, that the Lacedemonians had brasse targets by the institution of *Lycurgus*; & that in the time of the Heros almost all armour was made of brasse. The targets of the Lacedemonians that were fitt at the battaile of *Leuctra* were brasse, and to be scene in the time of *Pausanias*; and the brasse target of *Pyrhus*, which he left at *Argos*, being there slaine, was kept in the temple of *Ceres*. As for the weight, it is not so great, but it may become light enough by vse, and exercise. Wee see iron targets in use at this day, and not hard to be borne. And albeit the weight bee not for every mans strength, yet since it hath bene, and is, the manner to make choise of souldiers, and to fitt them with armes according to the ability of their bodies, I see no reason, but the stronger sort might well beare them. Another sort of targets there was which differed from the Macedonian not so much in forme of roundnesse, as in matter and manner of carrying. They were made of wicker, and borne in the left hand as our bucklers, which wee use not long since, and some covered over with hides some not. *Xenophon* saith, that *Cyrus* the elder armed the Persians with these wicker targets: & relating to the nations, through whose Countreies the Gracians passed in their returne out of Persia, & describing their armes, reporteth that the *Chalybes*, *Turchi*, & *Phrygians* had targets of this kinde. Now, that they were borne in the left hand, is clear by the same *Xenoph.* After writeth thus of the fight betwixt *Cyrus* & *Cresus*: The Egyptians & Persians encountering together, the fight was hard, & sharpe: & the Egyptians awed in number as in armes, had the advantage. For they fought with stiffe, long pikes, & their large targets better covered their bodies, then Curaces, or wicker targets, and being borne on their shoulders availed to joint thrusting forward. Seeing therefore their targets close, they advanced, & ranne on. The Persians were not able to endure the shock, by reason they bore their wicker targets at the armes end, but retiring by litle, & litle & giving, & taking blows, they maintained the fight till they came to the Engines. So saith *Xenophon*. Out of which words a man may plainly vnderstand the manner of beaueing these wicker targets, which by reason of lightnesse might easily bee held out at armes end. And as the Egyptian target, which reached downe to the foote, must needs be heavy, and therefore had need of the shoulder to support it, so was it with the brasse targets of the Macedonians, which were also weighty, by reason of the matter, they were made of. These therefore were the wicker targets on the shoulder. *Plutarch* witnesseth in the life of *Aemilius*. And the same *Plutarch* reherceth that *Cleomenes*, the King of Sparta taught his Lacedemonians, in steede of a speare, to use a pike with both handes, and to beare their targets

a Polyb. lib. 4. in
Philop. 5. a. 2
b Pausan. lib. 2. in
Argos. 1. 1. 1. 1.
c Pausan. lib. 2. in
Argos. 1. 1. 1. 1.
d Pausan. lib. 2. in
Argos. 1. 1. 1. 1.

e Xenoph. lib. 4. in
Philop. 5. a. 2
f Xenoph. lib. 4. in
Philop. 5. a. 2

g Xenoph. lib. 4. in
Philop. 5. a. 2
h Xenoph. lib. 4. in
Philop. 5. a. 2

i Xenoph. lib. 4. in
Philop. 5. a. 2
j Xenoph. lib. 4. in
Philop. 5. a. 2

k Xenoph. lib. 4. in
Philop. 5. a. 2
l Xenoph. lib. 4. in
Philop. 5. a. 2

m Xenoph. lib. 4. in
Philop. 5. a. 2
n Xenoph. lib. 4. in
Philop. 5. a. 2

o Xenoph. lib. 4. in
Philop. 5. a. 2
p Xenoph. lib. 4. in
Philop. 5. a. 2

q Xenoph. lib. 4. in
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s Xenoph. lib. 4. in
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w Xenoph. lib. 4. in
Philop. 5. a. 2
x Xenoph. lib. 4. in
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Philop. 5. a. 2
z Xenoph. lib. 4. in
Philop. 5. a. 2

a Xenoph. lib. 4. in
Philop. 5. a. 2
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Philop. 5. a. 2
x Xenoph. lib. 4. in
Philop. 5. a. 2

y Xenoph. lib. 4. in
Philop. 5. a. 2
z Xenoph. lib. 4. in
Philop. 5. a. 2

5 The light.] They had divers names given them in the Greek history. Some times they are called Euzoni, because they so girded up their apparel about the shat they were light and fit for motion: Sometimes Askueoi, because they bare no military furniture of defence: Sometimes Elaphoi because they resemble (as some think) a hare in lightness, and swiftness: Sometimes Gynnetæ (naked) because they were without defensive armes: Sometimes Pyloti (naked or light) as they are here termed by Aelian, and by Appian, and the other, that I cited.

6 Flying weapons only.] The light-armed are divided into three kinds, Archers, Darters, and Slingers. Which three kinds were of much use amongst the Græcians, and they bare only flying weapons. Xenophon testifieth that Cyrus the elder had them: And the Græcians in their returne out of Persia: Alexander had them in his warre against Darius: and Pyrrhus in his warre in Italy, Sicill and Greece: The Græcians against Brennus King of the Gauls: Both the Athenians, & Thebans at the battaile of Delos.

7 Arrowes.] Archers have alwayes bene of speciall esteeme for the field, and preferred before the other kindes of light-armed. Many nations have bene commended for their skill in shooting. Emongest the Græcians the Cretans were (of ancient time) sole archers, as Paulus writes. It was not their service equall with the service of the Persians. For Xenophon confesseth, that the Persian bow overreached the Cretan a great way: and that the Rhodians with their sling out-threw the Cretan bow. Of the Carduchians a people, through whose Countrey the Græcians passed at their returne out of Persia, Xenophon writeth thus: They carried no other armes, then bowes and slings. They were excellent archers, and had bowes well nigh three cubits long; arrowes more, then two Cubits. When they shote, they drew the string, applying there hand some what toward the neither end of the bowe, setting their left foote forward. With their arrowes they pierced both targets, and Curates. The Græcians putting thonges to the middle of their arrowes sent them back at the enemy in steepe of Darts. The same in effect is reported by Diodorus Siculus. Of the Parthian horsemen, Appian saith: When Crassus commaunded the light-armed to disband, & goe to the charge, they went not farre, but meeting with many arrowes, and being forced galled with them, they retired straight, and hid themselves emongest the armed, and gave beginning of disorder, and feare, representing to the sight of the rest, the force, and violence of the shotte, that rent all armes, they fell vpon, and made way awell thorough bodie, that had the best, as the worst furniture defensue: giving mighty and violent strokes from stiffe and great bowes, and forcing out the arrowe boisterously with the compasse, and bent of the bowe. Plutarch hath the very wordes, that are in Appian. The Indians also were good archers, albeit not much praised by Q. Curtius. Hee saith: their arrowes were two Cubits long; which they deliver out of their bowes, with more labour, then effect: for as much as the arrow, whose whole efficacy is in lightness, becometh altogether unwieldy by reason of the weight. And yet he telleth, that Alexander at the assault of the principall City of the Mallians, was strooke thorough his Curace into the side beneath the pappes with an Indian arrowe: with whome Plutarch and Diod. Siculus accord. Arrian addeth the wound was so deep, that his breath was fene to issue out together with his blood. The Gothes and other people of the north, that invaded the Roman empire, had their chief victories against the Romans by the help of bowes, and arrowes. Vegetius (before alleaged) speaketh plainly: So our souldiers, saith hee, vnarmed both

^a Polyb. lib. 1.
^b Appian. lib. 1.
^c Polyb. lib. 1.
^d Appian. lib. 1.
^e Appian. lib. 1.
^f Appian. lib. 1.
^g Appian. lib. 1.
^h Appian. lib. 1.
ⁱ Appian. lib. 1.
^j Appian. lib. 1.
^k Appian. lib. 1.
^l Appian. lib. 1.
^m Appian. lib. 1.
ⁿ Appian. lib. 1.
^o Appian. lib. 1.
^p Appian. lib. 1.
^q Appian. lib. 1.
^r Appian. lib. 1.
^s Appian. lib. 1.
^t Appian. lib. 1.
^u Appian. lib. 1.
^v Appian. lib. 1.
^w Appian. lib. 1.
^x Appian. lib. 1.
^y Appian. lib. 1.
^z Appian. lib. 1.

^a Diodor. Sicul.
lib. 14. cap. 11.

^a Plutarch. in
Crisp.
^b Curtius lib. 5.
251.

^a Plutarch. in
Alexand. lib. 1.
cap. 17. § 46.
^b Arrian. lib. 1.
cap. 19. § 1.

^a Veget. lib. 1. c. 10.

both bodies and heads, encountering with the Gothes, were oftentimes wholly defeated, and slaine, with the multitude of their arrowes. I may not pretermite the praise of our nation in this skill. Our owne stories testify, that the great battailes we gayned against the French, were gayned by the main shooting of our archers principally. And that the English have heretofore excelled in archery & shooting, is cleere by the testimony even of Strabo: a Cicerus (whom I named before) commending the use of bowes, as necessary for the service of the field (& that long after gunnes were invented) praising the English before all other, and stretch him down, as a patterne for others to follow. A 2^d Partitus, disputing of the violence of arrowes, doubteth not to asseure, that an English arrowe with a little waxe put vpon the point of the head, will passe through any ordinary Corsette or Curace. Howsoever the credit of bowes is less, as this present, with many great souldiers, yet haue they of ancient time been highly prized. Vegetius saith; how great advantage good archers bring in fight, both Cato in his bookes of military discipline doth shewe evidently, and Claudius, by augmenting the number of archers, and teaching of them the vse of their bowes, overcame the enemy, whome before hee was not able to matche. Scipio Africanus (the younger) being to giue battaile to the Numantines, that before had forced a Roman army to passe vnder the yooke, thought hee could not otherwise haue the better, vnlesse hee mingled chosen archers in euery Centurie. And Leo the Emperour in his Constitutions militarij hath this Constitution amongst others: You shall commaund all the Roman youth, till they come to forty yeares of age, whether they haue meanes skill in shooting, or not, to carry bowes & quivers of arrowes. For since the art of shooting hath been neglected, many, & great losses haue befallen the Romans. And in another place: you shall enioyne the Commandours vnder your charge, in winter to take a view, and to signify to the Turmarches (Coronells) now many horse, & what kind of armes the souldiers, vnder their commaundes, stand in need of, that necessary provision be made, & the souldiers be furnished in time convenient. But specially you are to haue care of archers; & that they, whome remaine at home, & haue vacation from warre, hold bowes and arrowes in their houses. For carelesse heerein hath brought great damage to the Roman State. So Leo. This of old time was the opinion of the Romans concerning archers. Howe we are fallen out with them in our dayes (the skill of the bowe, being a quality so commendable, and so proper to our nation) I knowe not, vnlesse fire-weapons perhaps haue put them out of countenance. And surely it may not be denied, that the force of fire-weapons of our time doth farre exceed the height of all old inventions for any one enemy. And, when I haue given them the first place, I will not doubt to giue the second to bowes and arrowes: being so farre from casting them off, that I would rather follow the wisdom of the Græcians, whoe albeit they esteemed arrowes the best stinging weapons, yet thought it not amisse to hold in vse slingers, and darters. Every weapon hath its property, and that which is fittest for one service, is not fittest for another. The fire-weapons haue there aduantages: They haue also their disadvantages. Their aduantage is, they pierce all defence of armour, and lighting vpon a place of the body, the wound whereof endangereth life, they bring with them certaine death. Their disadvantages are, they are not alwayes certaine, sometimes for want of charging, sometimes through overcharging, sometimes the bullet rowling out, sometimes for want of good powder, or of dried powder, sometimes because of an ill dried matche, not fitt to coale, or not well cocked. Besides they are somewhat long in charging, while the musketeer takes downe his musket, vncocks the matche, blowes, proynes, shutes, casts of the pan, casts

^a Aelian. lib. 1.
cap. 10.

^b Veget. lib. 1. c. 10.

^a Leo. cap. 4. § 5.

^a Leo. cap. 12. § 5.

castes about the musket, opens his charges, chargeth, drawes out his slinging sticke, rammes in the powder, drawes out againe, and puts vp his slinging stick, layes the musket on the rest, blowes of the matche, cockes, and tryes it, gardes the pan, and so makes ready. *All which actions must necessarily be observed, if you will not faile of the true use of a musket.* In raine, snowe, fogges, or when the enemy hath geynd the windle, they have small use. *Adde that but one ranke (that is the first) can give fire upon the enemy at once.* For the rest, discharging, shall either wound their own Companions before, or else shooe at vandon, and so nothing endanger the enemy, the force of a musket being only available at point blank. Contrarywise the discharging of arrowes is in the weakness of the stroke. Which is not able to enter a Curace, that the force of bowes is vaine, snowe, winde, haile, fogges, hinder little (especially the firing of the bowe being not so vaine) may rather profit. Because in them you can hardly disperse, much lesse or aside, the fall of the arrowe. As for quickness in delivery the bowe farre excelleth the musket. A good single archer is able to give five shooes in exchange for one of the muskietier, and that with such certinty, that you shall not boare of an archer that miseth the delivery of his arrowe, where the muskietier, often faileth by reason of the accidents and impediments before by mee rehearsed. Iohne that a whole Squadron of archers, being embattailed, may shooe at once together: which onely the first ranke of muskietiers may doe. And make the case there were a hundred muskietiers, and a hundred bowe-men eche diggited into ten files, eche file coneyning ten men, the bowe men shall bee able to shooe at once a hundred arrowes (all these arrowes) for ten bullets given by the muskietiers, namely those ten of the first ranke discharging alone. It must not bee pretermitted, that the bowe and quiver both for marching, & all service, are lighter and of lesse labour to use, then a musket, which is not small advantage in armes and fight. To conclude the bowe-men may be placed behind the armed force, and yet in shooting over the Phalanx as the enemy before issuing, and at all the time of fight, even whilst they are at the side of the pike, where the muskietier, there placed, must either idly look on, or else playing with his musket, most of all endanger his owne friends. Neither is the force of arrowes so weak, as is immagined, nor not in the arming of our dayes. For the pike, albeit hee have his head and body covered, yet are his legges, and feete, his armes, and handes open to woundes: any of which parts being wounded bringes a disability of service. To say nothing of his face, and eyes, before which the showers of arrowes falling like a tempest without intermission, must needs breed a remediable terror, and make him thinke rather of saving himselfe, then offending his enemy. The muskietier being also unarmed is as subject to the shoote of arrowes, as the archer is to the shoote of the musket, and the arrow touching any vitall part, as much taketh away life, as doth the musket. Lastly a horse-man for his owne person (I must confesse) is safe enough from the danger of arrowes by reason of his armour but his horse, being a faire and large mark, and having neither barbe, nor pectorall, nor ought else to hide his head or breast, how can hee escape woundes? Witnesse our fieldes in France, where our Archers alwayes beate the frenche horse, being barbed, and better armed, then our horse were, at this day. And for the bloody effect of bowes the story of Plutarch is worth the rehearsing. He in the life of Crassus hath thus: The Parthians opposing the Cataphracts against the Roman horse, the other Persians galloping heere and there dispersedly, and troubling the face of the field, broke up from the bottom, hills offund, that raised infinite dust, whereby the Romans lost their fight and voice: and thronging together, & thrusting one another were wounded, and died not a simple, or quicke death, but tormented with convulsions

a. Plin. lib. 10.

b. Plutarch in Crassus.

convulsions and panges of grief, wallowing up, and downe, in the sande to breake the arrowes in their woundes, or else endeavouring to pluck out the hooked heades, which had pierced vaines and sinewes, renting a frethe themselves, & adding torment to torment: so that many died in this manner, & the rest became vnprofitable. And when Publius Crassus desired them once more to charge the Cataphracts, they shewed their handes nailed to their targets, and their feete fastened to the ground, whereby they were vnable either to fly, or fight. These wonders did the Arabian bowes, which notwithstanding were not to bee compared to our ancient English bowes, either for strength, or farre shooting. And that wee may not seeme to rely upon antiquity alone, The battaile of Caraculac (commonly called the battaile of Lepanto) fought in our dayes between the Turkes & Christians by sea may serve for an experience of the service of bowes and arrowes. In which there died of the Christians by the arrowes of the Turkes above five thousand, albeit they were in galleys and ships, and had their blindes pretended to sue from fight, and mark of the Turkes, where as the artillery of all sorts of the Christians consumed not so many Turkes: notwithstanding the Christians had the victory. Nowe then for vs to leaue the bowe, being a weapon of so great efficacy, so ready, so familiar, and as it were so domestickall to our nation, to which wee were wont to bee accustomed from our Cradle, because other nations take themselves to the Musket, hath not so much as any shewe of reason. Other nations may well forbeare that, they never had. Neither Italian, nor Spaniard, nor Frenche, nor Dutche, ha these five hundred years, been accounted Archers. It was a skill almost appropriated to our nation. By it, wee geynd the battaile of Cressy, of Poitiers, of Agincourt, in France: of Navarre, in Spain: By it, wee made our selues famous vnder Christendome. And to give it over upon a conceit onely (for noe experience can say that our bowe was ever beaten out of the field by the musket) will prouoe an imitation of Aesops dogge, whoe carrying a piece of flesh in his mouth over a river, and seeing the shadowe in the water, fasted as the shadowe, and left the flesh. If hee kee not thus to abase the service of muskets, which all men must acknowledge to bee great; I only these, there may bee good use of bowes, if our archers were such, as they were wont: which is not to bee dispaired, and will easily come with exercise.

8. Dartes] The names of dartes are diuers in the Greek Story. A Darteis often called Acontion: and thereof cometh Acontizo, to throwe a darte, and darter is called Acontistae. So doth Aelian heere terme a darte. Sometimes a darte is termed Palton of the verbe *παλτων* signifying to shake or make quiver. The word Palton is much used in Arrian and Xenophon especially, when they speake of the Persian dartes. Ter^o Diadorus Siculus nameth the Persian darte Saumion: which name also is given to a Grecian darte by Plutarch, and by the same Diadorus. Sometimes a darte is named Doration: Doria, as I said, being a Speare, and Doration according to Suidas, a little speare, or darte. Aelian useth the word in this Chap. Lonche, albeit it properly signify the head of speare, or darte, yet doth it sometimes signify the darte it selfe. So is it taken in Xenophon, when hee telleth, that siene weapons began to walk on all sides, *αὐτοὶ δὲ δαρτεῖς* (that is dartes) arrowes, and floues out of sinners, and come out hand. And Diodorus Siculus hath *δάρτεσιν* the *δάρτεσιν* to throwe dartes, even in the actes of Alexander. Ter^o Ter^o we find, that speares were also cast vnder that name, and Xenophon saith, that the Thebans cast Dorata against the Lacedaemonians. The Darte hath bene in use amongst all nations. The matter, fashion, and force of the Roman darte may bee sene in Vegetius, and in Lipsius his Commentaries ad Polybium. The manner of the darting of the Macedonian armed appeareth in the fight betwixt Chorus and Dioxippus before by mee mentioned: where we find that Chorus cast

b. Xenop. de re mil. lib. 10. cap. 2.
c. Arrian lib. 1.
d. Xenop. lib. 1.
e. Xenop. lib. 1.
f. Xenop. lib. 1.
g. Xenop. lib. 1.
h. Xenop. lib. 1.
i. Xenop. lib. 1.
k. Xenop. lib. 1.
l. Xenop. lib. 1.
m. Xenop. lib. 1.
n. Xenop. lib. 1.
o. Xenop. lib. 1.
p. Xenop. lib. 1.
q. Xenop. lib. 1.
r. Xenop. lib. 1.
s. Xenop. lib. 1.
t. Xenop. lib. 1.
u. Xenop. lib. 1.
v. Xenop. lib. 1.
w. Xenop. lib. 1.
x. Xenop. lib. 1.
y. Xenop. lib. 1.
z. Xenop. lib. 1.

k. Vegetius lib. 1.
l. Lipsius Polyb. lib. 1. dialogo 4.

sling weapons. The Launciers clofed, and charged the enemy with their launces. The word Cataphraſto (to cover with armes) giveth name to the horſemen Cataphraſts: and as the horſemen are called Cataphraſts, ſo is the furniture of horſe and man called Cataphragma. How they were armed *Ælian* ſheweth when he ſaith they cover themſelves and their horſes with armour yet was it not always, that the whole horſe was armed. * For *Xenophon* ſpeaking of the Perſians in the time of the elder *Cyrus*, ſaith, they armed their horſes with frontlets and pectoralls & covers for their thighs. As much hee ſaith of the ſix hundred horſes that followed *Cyrus* the younger againſt *Artaxerxes*, ſaying they wanted cover for their thighs. The horſmen themſelves hee ſaith great Curſes, and cuſſes, and head pieces. So it appeareth that the horſe were not all over armed, but only their heads their breſts and their forethighs. The *Plutarch* ſpeaking of the Cataphraſts in the time of *Lucullus*, ſaith, their legs, and their thighs were unarmed. Concerning the Perſians ſaides, I know not one of what another ſaith thus: The Curſe of the Parthian horſemen is made in this manner: The pectorall covereth his breaſt, and thighs, and his hands to the fingers end, and his legs. The hinder part, his backe, and necke, and all his head. There are buttons made for the ſides, with which both the parts being faſtened, it maketh the whole horſemen ſeem, as if hee were made of iron. The iron neither hindereth the ſtretching out, nor the gathering up of his limbs, it is ſo exactly fitted to the nature, and life of all parts of the body. Likewiſe they arme their whole horſe with iron, except his hooves, becauſe their owne armor would little avail, in caſe their horſe miſcaried. *Curtius* deſcribeth the forme in the Perſian horſemen, whoſe furniture, hee ſaith, was made of plate faſtened together in continued dependances of ſcales of iron. *Appian* ſpeaking how the Parthians ſeeking to terrify *Craſſus*, and his army, upon the ſudden caſt away the covers of their armour, and both themſelves appeared in ſhining curſes, and head pieces the *Maſſagians* iron of which they were made, driving forth a ſhining, and diſperſed twinkling light, and their horſes gliding in braſen, and iron furniture. *Triſtrem* *Appian* in the ſame place, ſaith, that the belly of theſe horſes, was not armed. A for the french horſemen, ſaith he, that followed young *Craſſus*, when they perceived, how little they prevailed with their ſtaues againſt the ſure, and unpierceable armour of the Parthians, lighting from their owne, and creeping under the Parthian horſes, broke them into the bellies, and they impatient of paine and ſtinging heere, and there, an I treading under foote, as with their riders as their enemies, died in the place. *Plutarch* hath the like. The Cataphraſts, beſide their armour of defence, had a lance, or horſemen ſtaffe, to fight withall. * *Plutarch* affirmes it: *Lucullus*, ſaith hee, after hee ſawe *Tigranes* his Cataphraſt horſemen (who were of moſt account) defended, as it were, by a hill, that had the ground about plaine, and broad, and the aſcent (which was about ſower furlongs in length) not very hard, or ſteepe, commaunded the Thracian, and gaule horſemen, hee had, to give upon the flanke, and to put by the launces with their ſwords: For the only ſtrength of the Cataphraſts is his lance, and it alone hee is able to ſee either in defence of himſelfe, or annoying the enimie: being by reaſon of the weight and harſhnes of his furniture like a man ſhutte and locked up in a wall. *Heriberto* *Plutarch*. Likewiſe the Parthian Cataphraſts, albeit they ſlabore, and arm, yet they had all launces, with which they came to the booke with the enimie. * When the armie of Antiochus (ſaith the ſame *Plutarch*) ſawe the Parthians ready to give on the armed turning their face about toward the enimie, rooke in the light armed, and ſhut them vp with in their battels: themſelves kneeling upon one knee, held

a Xenophon Cyro. lib. 8. c. 10. A

b Xenophon de re. mil. Cyro. lib. 1. c. 10. B

c Appian in Parth. c. 44. B

d Appian in Parth. c. 44. B

e Plutarch in Lucull. c. 10. A

f Plutarch in Antioch. c. 10. A

held out their targets before, the ſecond ranks with their targets covered the heads, and upper parts of the foremost, & the following ranks did the like one for another, the figure was like the tying of a houſe, & represented a ſheaf worth the ſeeing, and was the ſureſt defence that might bee, to make the arrows glance off, without harme doing. The Parthians imagining this kneeling proceeded from wearineſſe, and faintneſſe, layed aſide their bowes, and taking in hand their launces, ranne upon the Romans, whose giving a ioint ſhowe ſprung up preſently, and ſtriking them with their darts, ſlew the firſt, and put the reſt to flight. By theſe two teſtimonies the lance of the Cataphraſts is clearly proved. In what manner the Cataphraſts came to fight, *Nazarius* (cited by *Steevens*) ſheweth plainly in a Panegyricke of his. The Cataphraſts, ſaith hee, in whom was the principall ſtrength of the field, viſe this diſcipline in charging. After cloſing their files, they keepe an equalitie in moving forward to charge, & being free from wounds, they break without difficulty any ſtrength of battell oppoſed againſt them. They are ſaide to bee free from wounds, becauſe both themſelves & their horſes (eſpecially before) are covered with ſure armes. Their moving muſt be ſlow, becauſe of the weight of their armes, which ſlowneſſe was recompenced with the violence of their charge, which neither horſe, nor foote was able to reſiſt. And yet they had another advantage: in that, being overthrown, or ſlipping, or falling to the ground, neither horſe nor man, were able eaſily to raiſe themſelves againe. Such was the weight of their armour.

14. Launciers are ſuch] Launciers, ſaith *Ælian*, joine with the enemy, & fight hand to hand with the lance. And did not the Cataphraſts ſee? They did, but their armour diſſerved much. The Cataphraſts both horſe and man, were all over armed. The horſe of the Launciers was not armed, and himſelfe, albeit hee were armed, yet not ſo armed, but that many parts of his body were bare of armes. And his armour came much ſhort of the complicate. *Arrian* ſaith that the Macedonians being Launciers were not able to encounter with the Scythians, who were Cataphraſts, both becauſe of their number, and alſo of their manner of arming. And as the Launciers armour was not ſo heauiſe, as the Complicate, ſo was it more heauiſe, then the armour of the foote. *Xenophon* ſeemeth to ſignifie ſo much, ſelling of himſelfe, that taking the targeties of the front, and ſome out of the midſt of the hollow ſquare battails, and three hundred choſen men, that *Cheriloſophus* had with him in the front, hee marched away with all ſpeed to ſeiſe upon the toppe of a certaine hill. * And exhorting his ſouldiers to haſte, you may well, quoth *Sotiridas*, the Scionian, talke of haſte, that are on horſeback. I, in the meane time with this heauiſe target, am ſcarce able to marche. *Xenophon* hearing this, freight diſmounted, and diſranking *Sotiridas*, tooke away his target, and with it on his ſhoulder continued his haſt in marching. By chance hee had on at that time a horſemens armour, where with altho' hee were overpreſſed, yet ſlacked hee nothing of his pace. The reſt of the ſouldiers beating and reviling *Sotiridas* compelled him both to his target, and place againe. At laſt they gained the hill, they purpoſed, and made the enimie abandon the nether ground. *Xenophon* was ſo overpreſſed with the horſemens armour. If it had bene but equal in weight with a foote mans, hee might, as well have endured it, as the reſt. *Plutarch* ſheweth likewiſe the weight of the horſemens armour. *Philopoxenus*, ſaith hee, willing yet to give more ſtrength to the Kings party (hee meant Antigonous, the gardian of *Phillips* ſonne, King of Macedonia) & to come to hands with the enemy that was already in route, lighted from his horſe, and in a horſemens Curace, and heauiſe armour,

Steevens in com. cont. ad. a. 1. c. 10. B. c. 10. B.

a Appian in Parthian. c. 44. B.

b Xenophon de com. c. 1. c. 1. B.

c Plutarch in Philopoxenus. c. 1. B.

armour, wrestling hardy, and laboriouslye on foote with the ground, that was rough, & full of brooks, & ditches, hee was strooken through the thighs with a dart: the stroke beinge not dangerous, but forceble, so that the head passed through both his thighs. Hence both the heavynesse of the Launciers' surmises may be seen, and that Philopomens thighs were unarmed, though both which at once hee was wounded with a dart: And so the Launcier not so fully armed, as the Cataphract. The armes, that the Launcier bore are described by * Polybius speaking of the armes of the Roman husmen, who worth thus: The armour of these horsemen is at this day like the Græcian. Of old they had noe carcases, but fought in short gownes girded to the knee. By reason whereof they were ready, & active to alight from, and gett vp quickly, on their horses. But their fight was dangerous with the enemy, because they wanted armes. Their equises had two incommodities. For, being made slender and quivering, they neither could touche the mark, they aymed at, and most of them, shaken with the motion of the horse, fell out to be broken, before the head touched, or fastened upon any thing. Ioyne, that, having no iron point at the butt end, they served but for one stroke onely, and that at the first. And yet the head being broken of, the remnant of the staffe was of noe vse. The targets they had, were made of ox-hyde in forme like to cakes named *Popane*, which are used in sacrifices. And they were neither fitt to encounter the enemy, by reason they had noe stiffnesse or fastnesse in resistance, and being resolved, and foked, or putrified with raine, they could not bee any thing worthe. Finding these inconveniences by experience, they quickly changed for the Græcian armour; In which the first stroke of the head of the staffe is certeyne, and worketh the designed effect, by reason of the forme, which is not quivering, but stiffe and sturdy: & likewise turning forward the butt end, which is armed with a sharpe point, they might therewith fasten a sound, and forceble blow upon the enemy. The like may be said of the Targets, which both in charging, and defending, haue a sure & vnfailable vse. Which they noe sooner saw, then imitated. For the Romans, if any other nation, are good to change their fashions, and to chooseth that, which is best, wheresoever they finde it. The Launcier then had a Carace, a head-piece, a lance, and a sword for his armes, and this was generall in Thracians; but some had besides a target, and were therefore called targetiers. The Launciers were called in greke Doratophoroi, or Xeltophoroi: two severall appellations in shewe, but signifying in deed but one thing, the one being derived from the matter, the other from the forme of the lance. * Doru, as I said before, signifieth wood: and because all the Launciers arme excepting the lance, were of other matter, then wood, the lance was called Doru, (of the wood) and the Launciers Doratophoroi. As for Xylton, or Xelton (for they signify one thing) is cometh of the verbe Xuo, or Xeo to haue, or polish (as our sayners doe) and the lance, being made of wood, haue, or polished, are named Xylta, or Xelta, of the forme (as I said) that is given them by fluting, and the Launciers, that beare the lance, Xeltophoroi, or Xyltophoroi. And here I am once to note for all, that wee are not to presse wordes according to the proper signification of their primitives, from whence they are derived. For considering there are more things, then names of things, (as Logicians say) the most copious language, that is, cannot give proper names to all. Hence come the wordes of divers significations. And howsoever names seeme at first rough, & strange, yet, and cu forme make them smooth, and gives them passage. As the coyne of a Prince is current by the stamp, hee sitteth upon the metalle, what metalle soeuer it be, fine, or base.

* Polyb. lib. 4.
471. B

* Arzenetofu-
dus Xylton an-
Doratoph 1. 1. 1.

16 Acrobolists] The word importeth such, as throw aloft, or from alofte. Ballo signifieth to throw: Acron, the highest, or the uttermost. By common vse Acrobolizos is taken for to dart, and by consequent to skirmish a farre off. Because such as cast fling weapons, as darts, and stones, and the like, came not to steadfast fight, but lay aloft, and onely throwe their weapons at the enemy, and of so doing are called Acrobolists. Acrobolizos in Polybius is interpreted Skirmishing. And Diodorus Siculus setteth Acrobolizos, and a short meddley in fight together, which Xenophon setteth Acrobolizos by another word flowing from the same fountain.

17 Tarentines] They are so called of a City in Italy Tarentum by name, the inhabitants whereof, that were horsemen, used this manner of fight. But he maketh two kind of Tarentines; one, that ever fought a farre off with darts, and never came to hand with the enemy, the other, that after a dart or two cast close up, and fought horse to horse as once made fast together, and one being weary, leaped upon the backe of the other.

18 Some vse darts a farre off] Of the manner of fight of these horsemen, the passage of Xenophon is worth repeating. After these things done, faith hee, the aide of Dionysius (which hee sent the Lacedæmonians) arrived, being more then twenty Gallies. They brought French, and Spaniards, and about fifty horse. The next day the Thebans, and their confederats, embattailing their armie, and filling the with the whole plaine even to the sea-side, & to the hills, that lay about the City (of Corinth) destroyed whatsoever, might strike any vse. The horsemen of the Athenians, and Corinthians, seeing the strength of the multitude of the enemy, came not neere vnto them: but the horsemen of Dionysius, albeit fewe in number, galloping heere, and there, dispartedly, and putting spurs to their horse, charged them with their darts, and in case the enemy followed, they returned with all speed, and then turned againe, and threw darts afresh. In doing these things they used to alight from their horse, and rest themselves, and if any of the enemy singled out to fall upon them, leaping quickly againe to horse-backe, they fled: and being pursued any distance from the army, as soone as those that pursued them retired, the Tarentines followed, and plyed them with their darts, and put them to great distresse: forcing the whole armie to advance, and retire, as they list themselves. So farre Xenophon. Another example I will add out of Livy of the Numidians, whose manner of fight is all one with the Tarentine manner. In Liguria faith hee, nothing worthy of memorie was done a long time. At the end of the yeare all things were brought to extreame hazard. For both the Consuls camp, being assaulted, was hardly defended, and not long after, when the armie was led through a Forrest, the way whereof was straight, and narrow, the Ligurians possessed themselves of the mouth of the straights. Through which when the Consull could find no passage, hee turned about his armie, and purposed to reduce it, the way he came. But the mouth of those straights was likewise possessed by a part of the enemies forces. And now the remembrance of the Defeate of Caudium presented it self not onely to the minds, but even almost to the eyes of euery man. There were wellnigh eight hundred Numidian horse at that time in the camp. The Commander of them promised the Consull to breake through on which side hee pleased; onely he desired to know on which side most hamblers, and villages were. Upon them, said hee, I will fall, and sett the houses on fire presently, that, that feare may compell

* Diodorus Sicul.
lib. 14. 481.
* Xenophon lib. 2.
Cyn lib. 4. 100. C.

* Liv. decad. 4.
lib. 3. 82. C.

* Xenophon lib.
lib. 2. 17. 61. 1. 1.

* Livy decad. 4.
lib. 3. 82. A.

compell the Ligurians to forsake the freights, they hould, and runne severall wayes to defende theire owne. The Consul much commended the man, and lided him with hopes of promiscs. The Numidians vp to horse, and began to ride heere and there, before the enemies gards, p. ovoking yet no man. Noo-thing at the first fight was more contemptible. The horie, and men, were little, and lean. The horifman vngilded, and vnarmed, saying that hee car-ried darts; the horie without a bridle galloping d. forward with a stiffe neck, and a head thrust out at length. They purposely augmenting this contempt fild from their horses, and dallied, and sported, to bring the enemy to a gaze. Wherefore the enemy, which at first were intentiue, and ready for a charge, became gazers on, and the most part vnarmed themselves, & sett downe vpon the ground. The Numidians rode vp neerer, and then backe againe, and by little, and little, gotte to the skirts of the forest, as if their horses, being resty, had caried them forwa: dagaist theire wills. At last, putting spurres to they broke through the midde of theire enemies gards, & entring into a larger field, they sett fire on all the houses next the way; then burned the next vil-lage, and wasted, and filled, all things with fire, and sword. The smoke fire-ene, then the cry of the people affrighted, lattely ould men, and children, fling for succor, raised a tumult in the campe. Therefore without consil or commaund every man of himself ranne to the defence of his owne, and in a-moment both the enemies campe was forsaken, & the Consul, delivered from his siege, came to the place intended. By these two examples the kinde of fight, that these darters one horse backe maintained, may be perceived, which was not to come neer the enemy, but to keep a loofe, and lett theire darts fly. Besides that to obfcur. any order in files, or ranks, but straglingly to gallop the field, seeking by theire d. standing to tolle the enemy out of his strength, and so to worke their advantage. And albeit in the second example, the Numidians did not theire darts, yet they would haue done it, if need had bene; and you shall find in other places of Livy, and Polybius, they did usually, as also in Caesar.

19 After they haue spent one or two of these darters on horsebacke differ from the other before mentioned, because at the last they ioyne, and fight hand to hand with the enemy, which the other did not. And what fight they with all: not with lance; for then should they be Lanciers, of whom wee haue spoken. But they fight with battel-axes, swords, and such other short weapons. Suidas affirmeth it, alleged by Arrianus: That, faith hee, at first cast light darts a fane of, and afterward approaching, ioyne with the enemy, fighting with battel-axes, or swords; which kind they call light-horifmen.

20 The horifmen, that vse bowes, I need not alledge any thing to shewe that the Scythians were good archers. It is knowne to any man, that is not ignorant of his- story. I will onely note, that in fleeing from the enemy, they were harmed as much, as in fol- lowing. For as they fled they turned half their bodies backward, and shotte at him, that followed, and expecte d not to be shotte. Of which fashion of fight Plutarch giueth this iudgement. The Parthians, faith hee, in their flight shoote backward, & doe it best of all other, except the Scythians; the invention being witty, both to faue themselves by that defence, and also to take away the shame of flight.

That which Plutarch attributeth to the Scythians and Parthians, Xenophon saith, the Persians did also, both for manner of fight, and flight.

The framing of a Phalange, and definition of the art Tactick.

CHAP. III.

Be seeing every phalange containeth an vniting of bodies, offices of com- mand, orders in place, a Convenient number of men, and wordes of Di- rection aswell for daily exercise, or traying, as for true fights, It seemeth neces- sary to deduce euery of these things into particularity. The first labour there- fore in the art Tactick is for a Generall out of multitude, that cometh to hand confused, to choofe the fittest men, and dispose them into convenient places (that is to order them into files, and bodies) and of the whole number to pro- portion a reasonable levie, & fitting the service in hand. For to dispose and enable an Army, skillfully to march, to encampe, & to embattle, is a matter of no small consequence. In as much as we often find mightie Armies through their disorder to haue been defeated by a handfull of men wel disciplined & exercised. Wherefore Aelian defineth this art to bee a science of warlike motion: Polybius, To be a skill whereby a man taking a multitude seruable or deth it into files, and bodies, and inst. Teth it sufficiently in all things pertaining to warre.

Notes.

1 THE first labour] After prouision of armour followeth choice of men. What men, and out of what climats, and of what profession, and of what age, and of what constitution of body, and of what education, are to be chosen, because Aelian referreth to the discretion of the Generall, not fitting downe any particular. I will likewise passe over, noting onely some places, where hee, that is disposed to fight, may find the cir- cumstances of choice ofouldiers. Xenoph. Cyrop. lib. 1. cap. 2. 3. 4. 5. 6. 7. Et Stenochius ad hoc incipit cap. 31.

2 A reasonable levie and fitting the service] Levies are to be made according to the warre, which is undertaken. The enemy is not alwaies of one strenght. Sometimes the forces, against which wee are to lead our armie, are more, sometimes lesse. The Ro- mans, if the number of enemies were not very great, did but a Consular Armie, which consisted of two legions of Romans, and of as many foote of their Allies; when greatest, onely ioyned two Consular armies together. And for Allies theire foote, as I said, was equal with the Roman foote, theire horse were treble as many, and the Romans having three hundred horse to a Legion, the Allies had nine hundred. Tet in case of great necessity, wee read, that the number of the Legions was increased in a Consular armie. Polybius reporteth that, a little before the battell of Canne, the Con- sul Lucius Aemilius, and C. Terentius, had allowed in theire armie, which they led against Anniball, eight Legions, which never was done before. Alexander the great being to invade the Kingdom of Persia, which for wealth, multitude of men, and largeness of Territories, was esteemed the richest, mightiest, and great- est Empire at that time in the world, had not in his armie above one and thirty thou- sand foote, and five thousand, and odde, horse. Armies composed of multi- tude are neither fitt to be guided, and commanded, nor yet to be provided for.

D

And

Pol. lib. 1. cap. 2.

255 B.

Liv. deca. 1. lib. 1. cap. 1. A. 100.

Pol. lib. 1. cap. 2. 3. 4. 5. 6. 7.

Cap. de lib. 1.

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a. Frontin. lib. 4.
c. 12.b. Xenophon Age-
lilaon.

And hee that trusteth to multitudes, esteemeth not greatly the valour of his souldiers. *Exercises faide, he was not foiled by the Græcians through default of number, but because hee wanted men. As it is folly to leury more men, then is needfull, so is it rashnesse, or rather madnesse to put a few souldiers to hazard against forces, that exceed in number, and valour. Briefly all leues are to be tempered with consideration of persons, times, places, and other circumstances.*

3 For to dispose and enable an Armie? Here are set downe in a word, as it were, the principall heads of the art of warre, Marching, Incamping, and embattailing, to which heads all other may very well be referred. And of these three *Ælian* handleth in this treatise but two, namely embattailing, and marching: of embattailing, so much, as pertaineth to forming of a common Macedonian Phalange; of Marching, no more, then belongeth to embattailing in a march, that is to ordering of your men in that figure, which shall yield most advantage against the enemy, that meeteth you; excepting that hee shortly toucheth the marshalling of baggage in your marche. The other considerations of marching, as laying, or avoyding ambushes, sending out to discover, when to march by night, when by day, how to decieve and avoyde the enemy lying neere, remedies against horse, against shotte, against multitudes, passages of mountains, of woods, of rivers, of plaines, of drye, and sandy places, these, I say, and such like, hee toucheth not in a word. And for the skill of encamping, which comprehendeth the seating of your camp, and provision of all things belonging thereto, as also the siege, and defence of Cities, and fortresses, hee likewise passeth in over with silence, as a thing not incident to his purposed discourse.

4 A handfull of men well disciplined and exercised? *What exercises? duty for the making of good souldiers, experience of former times will teach. It hath been the manner of all famous generals to bring these souldiers to perfection by exercise. Vegetius saith very well, It is not length of life, or number of yeares, that teacheth the art of warre, but continual discipline & meditation of armes. Let a souldier serve never so many yeares, so long, as hee is vnexercised, hee shall bee still a raw souldier. The knowledge and science of armes maketh a souldier, which is not gained but by action. As long as a souldier handleth not his weapons, hee is noe Actor, but a looker on. For as all abilities in artes (which are called Habits) arise out of a number of actions preceding, so can noe man attaine to a perfect knowledge of armes, till hee have with care, and diligence, employed his study and labour therein, and upon the foundation of practise vaied the frame of sound and perfect skill. Noe man is naturally borne a souldier. One may more incline to warre then another, but the skill cometh not without industry and paines.*

b. Plut. in Pelop.

c. Plut. in Lysim.

5 Plut. in Pelop. For as all abilities in artes (which are called Habits) arise out of a number of actions preceding, so can noe man attaine to a perfect knowledge of armes, till hee have with care, and diligence, employed his study and labour therein, and upon the foundation of practise vaied the frame of sound and perfect skill. Noe man is naturally borne a souldier. One may more incline to warre then another, but the skill cometh not without industry and paines. 6 Plutarch saith, that it is neither Euratos nor the place betwixt Babilon and Gacion, that bringeth forth valiant and warlike men, but they are to be found in all places, where youth is bred vp in flame of vice, and boldnesse to vndergoe perill for vertues sake. Euratos was a river neere Lacedæmon; Babilon and Gacion two rivers with in the same City. The Lacedæmonians were accounted the most valiant people of Greece. And Plutarch speaketh thus of the victory, which the Thebans had against the Lacedæmonians; The Thebans, which till that day had noe reputation of valour, but afterward by exercise, & use of armes, under Epaminondas, and Cleonidas, became the bravest souldiers of Greece: Not unlike was the fauour of Pyrrhus to his master master: choole you, said hee, good bodies, and I will make them good souldiers. The strength of the body is requisite in a souldier to vndergoe the labours of warre, but exercise it is that giveth the perfect skill, and the desire to handle weapons. Therefore as Demosthenes, being demanded what was the first and principall thing in the art Oratory, answered Action, what

c. Veget. lib. 1. a. c. 12.
d. Cæcilius Balbo.

what the second, Action, what the third, Action: So may we truly say, that in the art military exercise is not only the first, second, & third, principall thing to make a souldier, but also all in all. *Ælian* speaketh not of exercise but in General: what particular exercise is fit for a souldier, hee, that desireth to knowe, let him reade, Xenophon Cyrop. lib. 2. 42. 8. C. & lib. 3. 77. C. D. Veget. lib. 1. ad capt. 9. C. ad capt. 19. & lib. 2. capt. 23. 24. 145. 146. comment. ad Polyb. lib. 5. dialog. 14. Læc. capt. 7. Patric. Parallel. parte 2. 130. Now for the victories, that have been obtained by a small number of men well exercised, against a multitude vnskillfull, and vntrained, I need, say nothing. Histories are plentifull with such therein. I will only recite one example wherein the difference may bee scene not between skillfull, and vnskillfull, but between skillfull, and skillfull both enured to labour, and both brought vp under the same practise, and discipline of Armes. At what time, after the death of Alexander the great, his chieffest Commanders fell at odds amongst themselves, and sought every man to establish himself in the possession of his Conquest, it chanced, that Antigonus, and Eumenes came together in two sundry battailes. In the first Antigonus had in his army above 28000. foote, 5500. horse, & 65. Elephants; Eumenes lesse foote, 17000. in all (but amongst them 3000. Argyraspidæ, whoe had served in all Alexanders battailes, & were invincible, & strok a great scare into the enemies hearts) & about the number of horse, his enemy had, & 80. Elephants: When the foote came to wyne, saith Diodorus Siculus, the fight continued a good while, & at last, many falling on either side, Eumenes his foote had the better by reason of the valour of the Macedonian Argyraspidæ. They, albeit they were broken in yeares, yet in regard of the manifold perills, they had been in, excelled in courage, & skill of fight, in so much that no man was able to withstand them. And therefore being but 3000. in number, they were notwithstanding sett against the enemy, as the strength of the whole army. In the other battaile hee speaketh of their age. At that time, saith hee, the yongest of the Argyraspidæ were noe lesse, then 60. yeares olde, or thereabout; the most of the rest about 70. & some were elder, al of the vnmatchable in skill & readinesse of fight, & strength of body, such was their dexterity, and courage gathered in continuance of dangers, which they had passed. Afterward rehearsing the battaile, he saith: The Argyraspidæ ferring themselves close, and with liuely force falling upon the enemy, killed some, and put other some to flight. And fought against the whole Phalange of the enemy with irrepressible fury, not loosing one of their owne men, & yet through skill & manhood slayng of the enemy about 5000. & routed their whole foote, which in number were many times more, then themselves. Thus writeth Diodorus Siculus of the olde practise of Macedonians: who yet fought not against strangers, or raw souldiers, or such, as were newly brought into the field, but against men of their owne nation, that had long handled armes, & wonne many victories, & been instructed, and trained in the same discipline and cōse military, that they themselves had been before: Such difference long practise, and experience wrought in the one against the other.

a. Diodor. Sicul.
lib. 19. c. 7.b. Diodor. Sicul.
lib. 19. c. 7.

What a file, or Decury is, and of how many men it consisteth.

CHAP. IIII.

TO order into files is to make files. A file is a number of men beginning at one Leader, and continuing in order of followers to the last man.
D 2 The

The number of a file is diversly given, * for some allow it eight, some twelue, and some sixteen men. Wee for this time will retaine the number of sixteen, both because that number is proportionable to the indifferent length of a Phalange, and also, if vñe require at any time to double the depth thereof, and to giue it thirty two men, or to lessen, and contract it, and make it but eight; neither of both shall hinder the service of the light-armed behinde, * for whether they vse Darts, or slings, or Arrows, they may casilie with their alieng weapons overreache the depth of the Phalange.

Notes.

Next after arming, and choyce of souldiers, it followeth to put them in order for service, that is first to file them, and then to band them (which is joining of files) and lastly to combataile them, which is to make a Phalange. Of these in the following chapters.

To make files The Tacticks have not expressed the precepts of this arte, all in the same wordes. A file is heere called Lochos, the signification whereof is divers. Sometimes it is taken for an Ambush, and Lochan significth to lye in Ambush: it significth beside a number of men, that are of one body, as it were, and under one commander, who is called Lochagos, and Lochizo is to sett in files. The number of this body hath bene diversly taken. The Thebans Lochos Hieros

first instituted by Gorgidas, or as other say by Epaminondas, consisted of three hundred men. The Lochos of the Lacedemonians of five hundred and twelue. Xenophon in his returne out of Persia telleth, that the number of the Lochoi of the Gracians, which hee ledde, was almost a hundred armed men. And when they chose extraordinary men to preserve the Placium (a hollow forme of square battaile where in the Gracians marched) from breaking, they appointed six Lochoi, of a hundred a peece, for that purpose, and Commanders to leade them. And after hee reckneth fiftie men to a Lochos. And in the first booke of Cyrus his expedition, he telleth of two Lochoi of the armed of the Regiment of Menon, that wereaine by the inhabitants of Cilicia, and counted them a hundred men. Cyrus in the same Xenophon commandeth his Lochos to bee made of twenty foure men. But the Lochos, that Alian here speaketh of is a lesse number, namely

sixteene, which was the file of the Macedonians, as appeareth by Arrian, and Polybius. Albeit Arrian calleth it not Lochos, but Decas, and Polybius the depth of the battaile. This number of sixteen was used by the Gracians also before King Philips time, as appeareth by Xenophon in his historie of the Gracians. And likewise by Thucydides, who reporteth, that the Siracians were so ordered against the Athenians. Leo saith it was the manner of the ancient warriors to make a file of sixteen, & calleth it a Tetragonal number.

2 Some allow it eight, some twelue The Lacedemonians made the depth of their battaile sometimes eight men (for a file is it, that measureth the depth of the battaile) and so fought with their enemies. Thucydides writeth as much: the Lacedemonians saith hee, were not alwaies ordered in depth alike, but as their Lochagoi (they were commanders of five hundred and twelue a peece) thought good, commonly notwithstanding the depth was of eight a file. Xenophon also writeth, that Dercyllides the Lacedemonian, being to fight with Trissaphernes, and Pharnabazus, ordered his Phalange into eight. The same

proportion was helde by Antistippus the Lacedemonian against the Corcyraans, and

and by Clearchus the Lacedemonian against his enemies. Xenophon saith, that Thrasybulus the Athenian, sailing out of Pyram against Pausanias the Lacedemonian King, ranged his men into eight. His wordes are: When Thrasybulus and the other armed sawe these things, they quickly gave aide to their owne people, and put their armed in order eight deepe. Pausanias being hardly layed vnto, and retiring foure or five furlongs, commanded the Lacedemonians, and their Allies, to resort vnto him, and there casting his men into a deepe Phalange, ledde against the Athenians. Out of which wordes wee may note, that the Lacedemonians of force not alwaies that order of eight deepe, but varied according to place, or other circumstance. Yet ordinarily they gave but eight in a file, or to the depth of their Phalange, as Thucydides writeth before. The same Thrasybulus with his complices entering the base City of Athens called Pyram to free his countrie from bondage of the thirty tyrants, having but a fewe with him, possessed the court, which led to the temple of Diana, called Munichia, and being assaulted by the garriſon of the Lacedemonians, ordered his armed men into ten deepe, and the light armed behinde them. The tyrants, and their followers stood in battaile fifty deepe. As the battaile of Leuctra the Lacedemonian armed were twelve in depth, the Thebans fifty. Alexander the great leading his arme against Clitus, and Glaucius, the way being so narrow, that no more then foure might marche in front, made the depth of his arme a hundred and twenty. And the souldiers that Xenophon brought backe out of Persia, when they purposed to sacke Byzantium, put themselves without commande in order of fifty deepe. In the text is fifty deepe, but the margin hath eight: which take to bee the truer reading, because Xenophon saith, the place was faire to fitt a battaile, being void of building, and having an even place. And it was not the manner of the Gracians to make a Phalange fifty deepe, unless there were extraordinary occasion.

3 In the battaile of Delos betwixt the Athenians, and Thebans, the Thebans were five and twenty in depth, the Athenians but eight. The same Athenian were eight in depth against the Syracians. So that the depth of eight was much used among the Gracians. Now be it found now, that they called a file of eight by the name of Lochos. Cyrus the elder made his file of twelve men, and the figure thereof hee called δωδεκάγωνον, and δωδεκάγων, and the file it selfe decas, which in signification albeit it is importent, yet wee must retaine the word, as it is used, and not try to the originall of the Etimologie, as I haue done before vpon other occasion. But Alian maketh his file of sixteen. His reason followeth.

3 For whether they vse darts &c.] The file being sixteen in number, the souldiers therein every one having after distance from other three foote, take up in the whole depth forty eight foote, and being doubled to thirty two men, they take up ninety six foote, which amounteth to thirty two yards. That bowes and slings casilie out reache this distance, appeareth by Vegetius, before by mee alleged, who saith, they stroke their darts a man may rather doubt, which in our account of scores is ten score. Of the markes fix hundred foote of, which in our account of scores is ten score. Of the score further, then thirty two yards. Epistippus writeth, that a dart was easily cast four hundred foote, which amounteth to a hundred thirty three yards, or as ween shooting musket, six score and odd. The reason why Alian placed the light armed behinde wee shall see hereafter in fitt place.

a Polyen lib. 2.
in fabricat. § 34.
d lib. 4. in Alex.
§ 21.

b Polyen lib. 2.
in Georg. 1.
c Athen. dipnot.
lib. 4. § 60.
d Plu. in Pelop.
e Xen. hule. in
ped. Cyr. lib. 2.
§ 21.

f Xenoph. de
pol. Cyr. lib. 2.
§ 20.

g Xenoph. de
pol. Cyr. lib. 2.
§ 20.

h Arrian lib. 7.
§ 16. D.
i Polyb. lib. 17.
§ 24. D.

k Xenoph. hile.
grac. lib. 2. § 18.
l Thucyd. lib. 2.
§ 8. B.

m Thucyd. lib. 2.
§ 20. A.

n Xenoph. hile.
grac. lib. 2. § 18.

o Xenoph. hile.
grac. lib. 2. § 18. C.

a Polyen lib. 2.
in fabricat. § 34.
b Xen. hile.
grac. lib. 2. § 21.
c D.

d Xenoph. hile.
grac. lib. 2. § 21.
e D.

f Xenoph. hile.
grac. lib. 2. § 21.
g D.

h Xenoph. de
pol. Cyr. lib. 2.
§ 20.

i Xenoph. de
pol. Cyr. lib. 2.
§ 20.

j Thucyd. lib. 2.
§ 8. C.

k Thucyd. lib. 2.
§ 8. C.

l Xenoph. hile.
grac. lib. 2. § 18.
m D.

n Xenoph. hile.
grac. lib. 2. § 18.

o Xenoph. hile.
grac. lib. 2. § 18.

p Veget. lib. 4.
cap. 1.

q Veget. lib. 4.
cap. 1.

r Veget. lib. 4.
cap. 1.

s Veget. lib. 4.
cap. 1.

t Veget. lib. 4.
cap. 1.

u Veget. lib. 4.
cap. 1.

v Veget. lib. 4.
cap. 1.

w Veget. lib. 4.
cap. 1.

x Veget. lib. 4.
cap. 1.

y Veget. lib. 4.
cap. 1.

z Veget. lib. 4.
cap. 1.

The order and parts of a file or Decury.

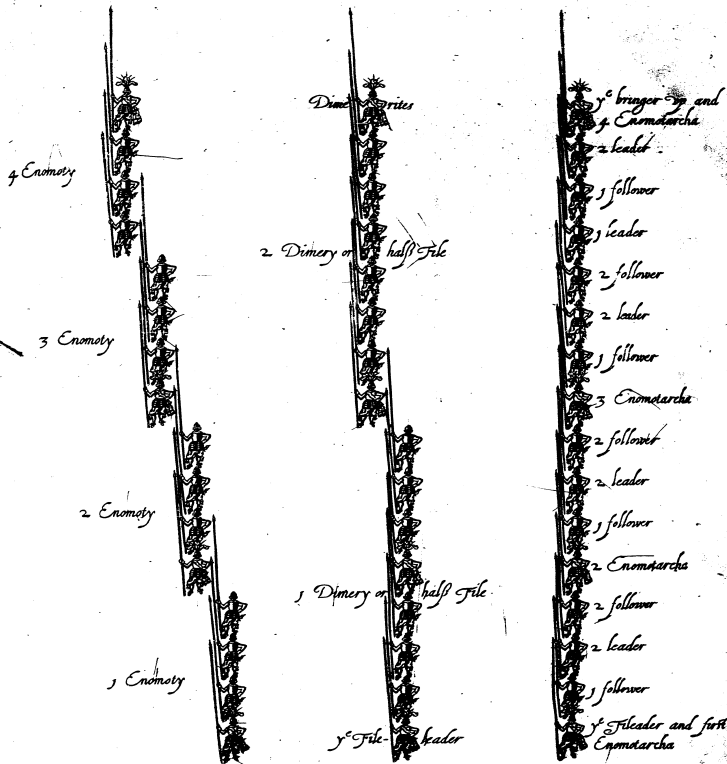
CHAP. V.

* THE best man of every file is the first in place, and hee, that leadeth the file, who is also called the file-leader, the Commander, & the fore-stander. The last man of the file is called the Rear-Commander, or bringer-up. The whole file it self is termed a verse, and a Decury, and of some an Enomoty. Yet there are, that hold Enomotia for the fourth part of a file, and the Commander of an Enomoty they call Enomotarcha, and two Enomoties they take for a Dimery, & name the Commander thereof Dimerrites, so that the half file is said to be a Dimery, and the Commander thereof Dimerrites. This man is the last of the file. Hee, that standeth next behind the file-leader, is named a follower, and the next after him a Leader, and the next after him againe a follower. So that the whole file consisteth of Leaders, & followers placed successively one after another. * It becometh the file-leader to be more sufficient, then the rest of the file, and next him the Leader of the half file, or bringer-up. They define a file to be a Rome of followers placed according to their worth successively after a file-leader.

Notes.

* THE best man of every file.] Why the file-leader ought to be the best man of the file many reasons may be given first because hee commandeth thereof. And as in all other things hee that is to rule, and governe another, ought to haue more knowledge, then hee that is commanded, and governed, so is it in matter of warre. Further, as his skill, so his valour, ought to be most: that his example may incourage and incite the rest. Which is the cause, that other commanders also are placed in front, and in the eye of the souldiers that their valour & forwardnes may breed an honest emulation in the souldiers to doe, as they doe. Besides the first place is most becoming him, that best deserveth, and is the more valiant a man is, the more hee deserveth to shewe it in the face of the enemy, thereby to winne himself honor, and reputation. Furthermore, hee may doe best service in the front, by entering into the enemies battaile, and making way for the rest. Not unlike a sword, whose edge maketh speedy passage into the thing, it cutteth, and draweth after it the rest of the iron, hee is never so blunt. In the front, the ranks of the file leaders give the push to gaine the field. Which reason I thinke lead* Gorgias the first instigator of the Theban Hieros Lochos, not to make an entire troupe thereof apart, but to place it man by man in the first ranke of the Phalange. Lastly the sight of the file leaders, being the choice of the armie, both for stature, and resolution (for such gallants in the front, haue cause to imagine that the rest of the armie, which they see not, is like to those they see. And, being never so valiant, they had rather haue to doe with weak, and relenting then stout, and resolute adversaries. As at the battaile of Cannae, Annibal answered one, that brought him newes, that the Consul had commanded the horse men to alight, and fight on foote, how much rather would I, quoth hee, hee had delivered them bound into my hands. I haue heard many hold opinion, that the manner of the Grecians, to bring their best men first to fight, is contra-

The ordering of a File



a Plutarch in Pericles.

b Aelian cap. 15.
c Leo cap. 5-77

d Liv. dec. 4. 51

try to the institution of the Romans, who held the Triarij (theire eldest, and best souldiers) in the rear, and brought them not to ioyne, till both the Hastati, and Principes were beaten, or retired. But if wee consider the diversity of both their embattailings, wee shall see noe great difference, or at least wee shall see, that the reason of placing their best men was not much different. The Græcians in framing their foure-fold Phalange made in length an even front of a 1000. files. The files were 16. deepe, and the best men therefore in front, because being placed in the middle, or in the reare, there would have bene no use of their valour, and the Phalange might have bene broken, before it had come to their turnes to fight. The Romans contrary wise, in ordering a Legion, made many maniples, and gave the front to the Hastati, the middle to the Principes, the reare to the Triarij. Nowe the Triarij being ordered in the Reare, might at the beginning bee brought to fight in Front, if need were; being noe need, they kept their place, till their Generalls found it fit to call upon them. So then this is the difference. The File-leaders of the Græcians had the Front, because otherwise in so deep a body, as the Phalange was, they could not have come to fight: The Triarij might alwayes have bene employed in Front, in flanke, or in the reare, as pleased the Generall. And that the Romans also in their severall Maniples placed their best men in Front, I cannot doubt. There stood the Centurions, which were the leaders of the Maniples, and in reason were to bee seconded with the best men under their command. * C. Cæsar thus may serve for an example where being noe Centurion, but an Evocatus, in the battail of Pharsaly betwixt Cæsar & Pompey, bidde his Manipulæ (they were of the Maniples, which hee once commanded) to followe him, and said hee would make his Generall give him thanks alive, or dead. Yet must I confesse, that the front was not the proper place of the Evocates. But hee chose the front, and held it a place worthy of his valour. It is said of C. Cæsar that, when hee fought with C. Antoninus, hee placed in the front of his army, all the chosen Centurions, and Evocates, and besides of common souldiers such, as were best armed. Livy speaking of a fight betwixt the Romans, and the Latines, and describing the forme of the Roman battail, after hee had limited the place of the Hastati, & Principes, writeth thus of the Triarij. After the ensignes (hee meaneth the Standards of the Legions) not the Ensignes of Maniples, were ten other Maniples, whereof every one had three Ensignes. The first Ensigned the Triarij,ould souldiers of tried valor, the next the Rorarij, not soe well esteemed for strength in either age, or deeds, the third the Accensi, a troupe of left trust, which was the cause, that they were cast in the reare. The Accensi were put in the reare, because there was noe great opinion of their valor: the Triarij had the front, because they were ould souldiers, and had bene sufficiently tried. See then in dividing of their armie into small bodies, or battalions, the Romans differed from the Græcians: in placing the best men of their maniples in front, they observed the same manner, that the Græcians did in placing their file-leaders in the first ranke of the Phalange.

2 A verse I have translated itichos a verse. The more a small signification is a name of any thing placed orderly. * See Xenophon applyeth it to trees, which were planted orderly one after another, and * Tullius to the standing of soldiers one after another in a discipline, as our souldiers are placed one after another in file. * Tullius Polius also acknowledgeth, that there were files, and ranks in Chorus, that is in dances upon the stage. * Ben Jonson saith it was commonly taken for a line, which was read from the left to right hand. And so by the way a verse, as wee read at this day, and as they read, when Ælian wrote this treatise, rather resembleth a ranke then a file, because in a ranke men stand side to side, as words doe being placed in a line. Yet because the word is received by use in that other sense, wee must like wise admitte the same.

a Cæsar de bell. lib. 2.

b Sallustius de mil. disciplin.

c Livius de decur. lib. 2. pag. 114. A

d Xenophon de Oec. lib. 1. c. 10. Tullius in Erid. lib. 2. c. 14. Ben Jonson in his play of the Swan.

e Suetonius in Nero. lib. 1. c. 14.

a Xenon Corp
b Erythologus
c Arrian lib 7.
d Leo esp. 4. 5
e Leo esp. 4. 5
f Erythol.

Patricius paratib.
mult. 201. 14. 92
2. part. 1. 166
e Suidas in Alex.
Enomotia.

f Erythol. mac.
made in Enomotia
g Hirc. in Bact.
Enomotia.

h Iul. Pollux lib
1. 9. 10.

i Arrian 7. 18. 13

3 A decury] *This in Greek Ælian calleth Decania, a word, which in this sense find in no other Author, then in him, and in Suidas. Xenophon calleth it Decas: for decath & tribicus and Arrian, and likewise Hefychius. A Leo calleth it decarchian and Akian.*

4 An Enomotie] *The word cometh from omnyimi to swear, not of omos a shoulder, as Robertellus, and Patricius imagine; of whom the first translate it in Latin Interputio, the other in Italian Spalgione, as it were a backing: Upon this conceit, I thinke, because in a file the whole number standeth one at the backe of another. Suidas saith: Enomotia is a body militarie amongst the Lacedemonians of 32 men, and is soe called, because they take theire oath together, not to forsake the place assigned them in battaile. With whom agreeth the great Etymologicon; and Hefychius likewise; who termeth it a body militarie, that taketh an oath and sweareth by the sacrifice, which is offered at such time, as they goe into the field. And surely you shall not finde the word Enomotia applied to other souldiers, then the Lacedemonians, or else to them, that the Lacedemonians commanded: untill it was afterwards taken up by the Macedonians. And Iulius Pollux expressly noteth, that Moira, and Enomotia, are proper appellations of the Lacedemonians, given to certaine of theire militarie bodies. Albeit both the text bee corrupted in Pollux, having Enomotia for Enomotia, & Moira a duty. As the Lochos is great, or little, so is the Enomotia, & the Lacedemonian Enomotia was 32 men, the Lochos being 120 but the file of Ælian being 16. and the Enomotie noe more, then the fourth part of a file. The Enomotie must containe noe more then foure men. One of every of these foure must bee a commander, who is called Enomotarcha, or the commander of that Enomotie. So that in the whole file, consisting of 16, there ought to bee foure Enomotarchas. Where they should stand in the file, is a question. Patricius maketh the file-leader the first Enomotarcha, the fifth man, the second, the ninth man, the third, & the 13 man the fourth; excluding the bringer vp, whom notwithstanding hee acknowledgeth to bee the second man of the file, and in dignitie next to the file-leader. I am of another opinion, and yett allowe the places of the first, fifth, and ninth, but thinke the bringer-vp ought to bee the last Enomotarcha: Arrian confirmeth my opinion: who writeth thus: Alexander returning to Babilon, found Prucestes newly come out of Persia, bringing with him 20000, Persians. Then commending the Persians for theire obedience in all things to Prucestes, and Prucestes for his care, and diligence, in ordering them, hee repared them into bands according to the Macedonian manner. Over every file hee appointed a Macedonian file-leader to command, and next a Macedonian dimerite, and a Decastater, so called of the paye hee had, which was lesse then Dimerites, and more then the common souldiers, then twelve Persians, and last of all the file a Macedonian, who also was a Decastater. So that in the whole file there were foure Macedonians, three, whose pay was more, then the common souldiers, and a file-leader the fourth, and more over 12. Persians. So Arrian. Out of which wordes we may learne first the number of the Macedonian file, which consisted of 12, Persians, and 4. Macedonians, in all 16, the number, that Ælian requireth in his file. Next, that the Enomotarchs, or commanders of the foure parts of the file, were likewise 4. Lastly that the bringer-vp was one of the foure by expresse words of Arrian, which is contrarie to the opinion of Patricius, and whereas Arrian termeth the third Enomotarch, Decastateros of the pay, hee received, it is to bee under stood, that Stater was a piece of coine, of the weight of foure dragmes of Athens whereof the*

Enomotarch

Enomotarch had ten by the month. The dragme was of value seven pence sterling, and the Stater, conteyning foure dragmes, two shillings and foure pence sterling; and ten of them were valued as twenty three shillings and foure pence. Which was the pay of the second Enomotarch, and of the bringer-vp, as Arrian affirmeth.

5 And the Commander Dimerites] *About the Dimerite Arrian, and Ælian, differ. Suidas leaveth the matter uncertaine, saing the Dimerite is commander of the half-file, but pointeth not out, which is hee. Arrian distinguisheth the Dimerite from the bringer-vp, and giveth a greater pay to the Dimerite, then to the bringer-vp. The bringer-vp, he saith, was noe more then Decastateros, where as the Dimerite had a greater pay. But Ælian twice in this chapter affirmeth, that the bringer-vp was the Dimerite, and addeth hee ought to bee the second man of worth in the file. And that the place of the reare is not much inferior to the front, Cyrus teach his bringers-vp in Xenophon in these wordes: You have a place saith hee no lesse honorable, then they, that stand in front. For being in the reare, and seeing & encouraging them, that behaue themselues valiantly, you make them more valiant, and the remisse and backward you incite, & spurre on, likewise to do as well, as the rest. Leo appointeth two Officers to a file, the file-leader, and the bringer-vp, & so maketh the bringer-vp the second person of the file. The reare being then the second place of the file, I conceiue no reason, why, as the file-leader commandeth the one half of the file, so the bringer-vp should not bee the Dimerite, and command the other, and I rather ascribe to Ælian, that of purpose describeth the particulars of his arte, as hee findeth them set downe in the ancient Tactics, then to Arrian, that, writing the historie of the death of Alexander, slumeth by chance upon these things not greatly incident to his narration. Yett may there bee a reasonable construction of both their meanings, if we consider the severall respects of the offices of these Enomotarchs. For the middlemost Enomotarch may bee termed the Dimerite in regard he standeth in the head of the second half-file, and in doubling the front and some other motions leadeth it: the bringer-vp because hee absolutely governeth it, and seeth that directions, given by higher officers, bee executed.*

6 It behoveth that the file-leader bee more sufficient] *The file-leader and bringers-vp ought to bee the most sufficient, because they have the whole government of the file, the one in the front, the other in the reare. Thereoft are under them, and to be called by the names of leaders, and followers. But yett is there a further disposition of the file, which, as I finde in Leo, I will set downe His words sound thus: over the other sixteen you are to appoint a file-leader (as hee is termed) resolute, and fit for service, and eight of these sixteen, that shall bee found fittest, you shall place in the front, and reare, of the file, foure in the front, namely in the first, second, third, and fourth place, other foure in the reare, in the sixteenth, fifteenth, fourteenth, and thirteenth place, that the front and reare may be strengthened with foure men a peece. The weaker are to bee placed in the midst of the file. This counsel, or rather precept, of Leo hath this reason. The front, and the reare, are the principall places the enemy commonly groweth upon. The front we alwaies turne against the enemy, if we can. The reare the enemy seeketh to surprize, and by it to disperse vs, if hee can. The flanks for the most part are secured by the horse, and light armed. For Leo placeth the light armed, and horse in the flanks. See these two places, being most subject to the violence of the enemy, require extraordinary care, and assistance. As for the weakest, which are in the midst, they never come to strike stroke, but after the front, and reare, are broken. In another place hee writeth to this effect: your Contubernies (the souldiers that cabin together) you shall order according to foure men, or to ten, or to foure,*

Leo 4. 5. 11

or

The Tactics

or to eight, or to sixteen, as you shall find most convenient, that being bound one to another with mutual acquaintance, they may fight one for another in battaile and bee more valiant against the enemy. But you shall doe more wisely, if when you are to joine, you place others by brothers, & friends by friends. For when hee, that fighteth, hath an entirely beloved friend standing next behind him, hee must of necessity haue himselfe with more egerneesse for his friends sake. And the other being ashamed not to requite one, that sustaines such danger in his behalfe, will hardly bee brought to forsake his friend so well deservuing, and first betake himselfe to his feete. *The same is the advise of Onesander, and was much practised in ancient time. The Lochos Hieros, or Holy-band, of the Thebans (whereof I spake before) consisted all of friends; that had bound themselves one to another in friendship. With this Holy-band Pelopidas gave the first disgracefull overthrow to the Lacedaemonians, that ever they had. Of this band Plutarch writeth, that it was never beaten untill the battaile of Cheronæa, when Philip the father of Alexander vanquisheth the Athenians, and Theban forces both together.* After which battaile Philip surveying the dead bodies, and coming to the place, where these three hundred lay, all close mingled one with another, and strooken through with the Macedonian pikes, hee wondred greatly, and hearing that it was the band of louers, and beloued, wept, and said, evilly may they perish, that suspect any filthines in deede, or suffering, to haue been practised amongst such men. *Cyrus the elder had his Homotimos nursed up together, and Alexander his Hetairios, whose extraordinary service appeared in all their battailes.* Diodorus Siculus writeth of Sesoosis the Egyptian King to this effect: at the birth of Sesoosis his father did a magnificent and royall deed. For gathering together all the children of Ægypt, that were borne the same day, and setting over them some to nourish and governe them, hee gaue the same education, and institution, to them all, conceiving that they, that were brought vp together, & partakers of the same liberty, would become the best affected, and most assured fellow helpers in warre. *This was the indgement of Myris, the father of Sesoosis, King of Ægypt, in providing assured assistance to his sonne for the conquering of the whole world, which by certaine blinde prophetes was promised him. Now what little trust there is to bee given to men, that are not acquainted one with another, Pompey that great Captaine of the Romans sheweth in his epistle to Domitius: For men, saith hee, are not quickly to be assembled hether by musters, and if wee had them, you are not ignorant how much they may bee relyed vpon, being vnacquainted to fight against ould Legions. Tet hatb Leo another mixture in his files. For hee would haue the ould, and new souldiers put together in one file. Least saith hee, the ould being by themselves alone, proue weak, and of small force, and the yong disorderly, having little experience. For the one, albeit ould, yet are well acquainted with service, the other albeit yong, and valiant, yet are vnskilfull.*

For the Enomoties, dimerie, and files, see the figure.

Joyning of Files.

CHAP. VI.

I Joyning of Files, is when one file is layed flank-wise to another, the Leader of the second file to the Leader of the first, and the follower of the second File-leader to the follower of the first, and so the rest. Every man that ranketh

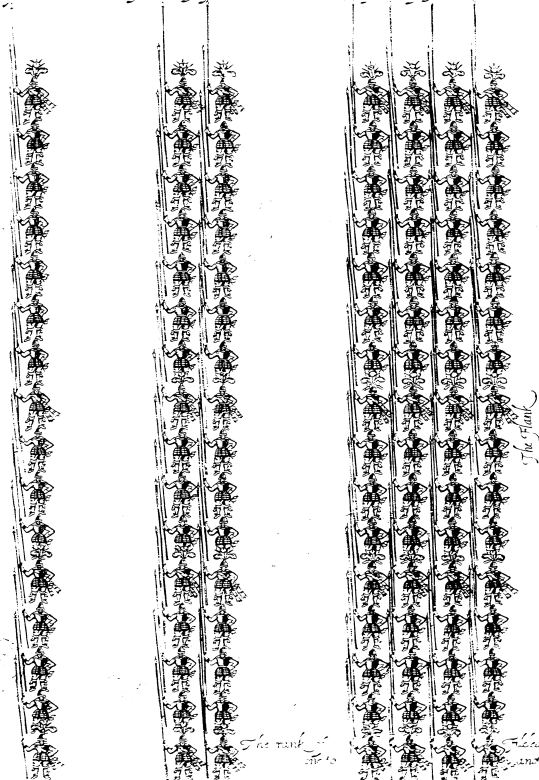
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Cap. 5.
Joyning of Files

1 File

2 Files Joyned

3 Files Joyned



The Rank

The Front

is called *Parastates*, as for example the *Leads* of the second file, to the *Leader* of the first, and so their next followers, and the rest. As often then, as the second file, the third, the fourth, and so the rest are layd flank-wise to the first, it is named *Joyning of files*.

Notes.

1 [Joyning of files is] A file of it self will worke little effect against an enemy. ^a For what can a man alone in front doe? ^b Cyrus in Xenophon witnesseth, that whereas the Egyptians stood a hundred in depth, they had beene in depth a thousand, for sixe farr hee, mee should have the fewer hands to fight against. The ranks bringeth the multitude of hands to fight. And it is held, that the more hands are with the encounter brought to fight, the more is his advantage, that bringeth them. This is done by joyning fil together, out of which joyning ranks spring, and ranks the more they increase, and extend themselves in length, the more hands are ready to encounter the enemy. Now, as it was said in the former chapter, that files consisted of leaders, and followers, from the first to the last. So is it in this chapter said, that ranks consist of side men from one end of the length of the Phalange to the other: Fewe, or many men, placed side to side in a right line make a ranke; as in two, or three files joyned together, there are sixteen ranks of two, or three men in a ranke. And the two or three file-leaders make the first ranke, their followers the next, and so the rest until you come to the sixteenth. The like saileth out in more files. ^b Virbicius saith that the file leaders make the front (as they terme it) of the Phalange, which they call also the first ranke. And further, hee saith, they, that runne in an even line betwixt the two wings, the right, and the left, are said to be Parastatai, or sidemen. Likewise the last ranke is called Oura, or the reare, and the commander Ouragos, the bringer-on. So Virbicius agreeing with Ælian. Now, out of these two chapters, is a cleare distinction of the names of souldiers, that by reason of their posture, or place, in battaile make the diversitie of files, and ranks. They, that make files are Protostatai, first standers, & Epistatai, after standers, which are by us commonly called Leaders, and followers. For these two saith Ælian make the file from the beginning to the end. Parastatai side standers, or, as we terme them, sidemen, make the ranks. And if you measure the length of the Phalange, you doe it by number of men in the ranke, if the depth by number of men in the file.

of a Phalange, the length, and depth thereof: of rankings, and sines; the division of the Phalange into wings: the place of the armed foote, of the light-armed, and of the Horse.

CHAP. VII.

THE whole bodie of the multitude of files is termed a *Phalange*: whose length is the first ranke of file-leaders, and is named, the *front*, the *face*, the *edge* of the battaile, the *ranke*, the *mouth*, the *Commanders*, the *fore-standers*, & the *head* of the files.

As much of the *Phalange*, as stretcheth backward from the *front* to the *reare*, is named the *depth*. The bearing straight forth of *side-men* in length, wher

ther they bee *Leaders*, or *followers*, is *ranking*. And the standing of *Leaders* and *followers* directlie in a line in depth, is *filings*.

A *Phalange* is divided into two whole parts beginning at the middle section of the front, and holding on cleane through to the vttermost parte of the depth; whereof the one half is called the *right wing*, and *head*, the other half the *left wing*, and *tail*. The two fold section it self, that divideth the length, hath the name of the *Nose*, and the *Mouth*. The *Light-armed* are placed after the *Phalange* of the *Armed*, and behind them the *Horse*. Yet if occasion require, both *light-armed*, and *Horse* are otherwise disposed, as after in this discourse will appeare.

Notes.

THE whole body of multitude of files is termed a *Phalange* [Joining of files makes ranks, and a sufficient number of files, and ranks together, make a body, which is called a *Phalange*. For that name is given to any entire body of an indifferent greatness, compacted, and united for fight. Itself thus deriveth the original of the word *Apo tou pelai allelois inai*; from the standing of the souldiers in battaile neere one to another, *Suidas* in the same sense, albeit hee differ a little in words, saith, the *Phalanges* are so called *Apo tou pelatai anchi*, of approaching one neere to another. The great Etymologicon goeth yet a little further, and saith, that *Phalanges* are as it were *Phalanges para to pelai kai eggyi cinai*, as it were *Pelagys*. These are the conjectures about the original of the name. Which of them is truest, is not greatly to the purpose. It is enough to understand, in what sense the word *Phalange* is commonly taken amongst *Tactick* writers, who, as I said, in a general signification call any great body of armed gathered together, and united for fight, a *Phalange*. See *Caesar* nameth the battaile of the *Helvetians*, into which they cast themselves, when they fought against him, and likewise the battaile of *Antiochus*, a *Phalange*. So *Plutarch* nameth the *Phalange* of the *Platians*, or *Quare* below battaile, into which the *Gracians*, *Theraps*, and the younger into *Persia*, followed themselves at their returne out of *Persia*. And the same *Xenophon* saith, the horse of the *Gracians*, when they were to encounter the *Persians*, ordered themselves four in depth, in forme of a *Phalange*. And *Arian*, that the *Persians* at the River *Granicus* were ordered in a long *Phalange*, and *Xenophon* againe discoursing how *Iphicrates* exercised his manie, when hee expected to fight with the *Lacedemonians*, saith, hee sometimes lead in a wing (that is in a large depth) sometimes in forme of a *Phalange*, in a broad front. The first inventor of the *Phalange* is thought to be *Pan* the generall of *Bacchus* his armie. *Polyanus* saith, *Pan* was the commander of *Bacchus* his armie. This man was the first that invented the order of battaile, called it a *Phalange*, and parted it into the *Right*, and *left wing*. For which cause *Poets* saie, that *Pan* carrieth two hornes upon his head. Besides hee was the first, that by flight, and cunning cast a feare upon his enemies. For when *Bacchus*, incamping in a hollow forest, was advertised by his spies, that an infinite number of enemies were lodged one the further side, hee began to be afraid. But not *Pan* who commanded the same night the armie of *Bacchus* to give as great a shout, as they could, The Rocks and hollownesse of the forest rendered it againe double to the enemy, & made shewe of a greater armie, than *Bacchus* had. Where with the enemy falling into a feare fled forthwith. In honour of this stratagem nee saie, that *Bacchus* is *Pans* love: & the cause hee night-fears, which fall upon Armies, were attributed to *Pan*.

So farre *Polyenus* about the inventor of the *Phalange*. The number of the *Phalange* is not always one. It may consist of ten thousand, twenty five thousand, or as many, as you list. *Antigonus* the King of *Macedony* had his *Phalange* of ten thousand. *Ptolomaeus* King of *Egypt*, of twenty five thousand. The ten thousand *Gracians* that went with *Cyrus* into *Persia* are called a *Phalange*. What number the *Helvetians*, and *Antiochus*, had in there *Phalange*, is not precise let downe by *Caesar*. Yet it seemeth by *Caesar*, that the most parte of the fighting multitude of the *Helvetians* cast themselves into a *Phalange*, and those of *Antiochus* likewise. But *Alians* *Phalange* is restrained to a certaine number, as the next following Chapter will teach.

The length whereof [The length of the *Phalange* is to be accounted by the rank not by the file. The file is but sixteen men deep. The rank from the point of one wing to the point of the other containeth at the most, and twenty four men in *Alians* *Phalange*. So that the files being short in comparison of the ranks, it is reason, that the length of the *Phalange* be measured according to the rank, not to the file. *Suidas* agreeth with *Alian* saying, that the length of the *Phalange* is the first *Synagma* (the first rank) of file leaders, which is ordered in a right line, stretching from one wing to another, and is called the face, and the mouth, and the front, & the edge, and the first-filing, and is the first standers of the battaile. The next row, being parallel to this, is called the second rank, and the third, the third rank, & so the rest. The length is termed in *Greece* *Mecos*, to which is opposed the depth, which is named *Bathos*. Neither is there in true account any other dimensions in a *Phalange*, besides the length, and the depth, which are in this chapter mentioned by *Alian*. Other names are given in *Greece* writers sometimes, but they signifie either the one, or the other.

3. Is named the depth [As the length runneth along by front from one wing to another, so the depth beareth backward from the front to the rear. The depth is properly called *Bathos*, as I said. And *Bathera* *Phalanx*, is a deepe *Phalange*. And *Arrian* saith, *Alexander* ordered his *Phalange* as *Bathos*, in depth. And *Polybius*, that the Romans made there battaile much shorter then before, but much deeper, *Bathytaran*. And as it is called *Bathos*, for the most part, so it is by *Leo* called also *Pachos*. For the depth of a file is by him termed depth, or thickness, *Bathos* etoi *Pachos*, in two severall chapters of his *Tacticks*, not in respect of the file it self, which is no more then a long line, as it were, and carrieth neither thickness nor breadth, but in respect of the *Phalange*, the depth whereof is measured by the file. And in the fourth, the twelfth, and fourteenth chapters hee termeth the depth of the *Phalange* it self (Thickness) *Pachos* alone with out adding *Bathos*; shewing thereby, that *Pachos* also signifieth the dimension of the *Phalange* from the front to the rear. But where some are of opinion, that *Platos*, breadth, ought to be read in those places in stead of *Pachos*, Thickness, they persuade mee not to be of there mind. For *Alian* himselfe giveth an *Attenuation*, or *Thinning*, (which hee callith *Leptymos*) to the *Phalange*: and that cannot be understood, unless there were in it a kind of Thickness before. And to make it more plaine, hee saith, that this *Leptymos* is, when the depth of the *Phalange* is gathered up and from sixteen men it becometh a lesse number. So that the Thickness of the *Phalange* is the full sixteen, which is also the depth, and making of it Thinner is to lessen the depth. To a Place *Platos* is fittly attributed, a Place being only superficies, which consisteth of Longitude and Latitude. So *Polixenus* speaking of a valley, wherein an ambush was layde to enrap *Alexander*, saith, the length stretched farre out, but the breadth, *Platos*, was narrowed to four lengths. The name of *Platos* is likewise given to a place by *Polybius*. But to say the truth

a *Caesar* de bell. gall. lib. 1.

b *Xenoph.* de rep. Cyrob. p. 100.

c *Xenoph.* lib. 1.

d *Arrian* lib. 1.

e *Xenoph.* lib. 1.

f *Arrian* lib. 1.

g *Plutarch* de bell. lib. 1.

h *Pan* 5.

a *Polyb.* lib. 1.

b *Suidas* lib. 1.

c *Leo* cap. 14.

d *Caesar* de bell. lib. 1.

e *Caesar* de bell. lib. 1.

f *Caesar* de bell. lib. 1.

g *Caesar* de bell. lib. 1.

h *Caesar* de bell. lib. 1.

i *Caesar* de bell. lib. 1.

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x *Caesar* de bell. lib. 1.

y *Caesar* de bell. lib. 1.

z *Caesar* de bell. lib. 1.

aa *Caesar* de bell. lib. 1.

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aq *Caesar* de bell. lib. 1.

ar *Caesar* de bell. lib. 1.

a Leo. cap. 5. § 1

truth Platos in a Phalange rather significth the length, then the depth, as appeareth by *Alian* after in the foure and forty chapter. And *Leo* calleth the front of the Phalange Platos, and when hee would have the front enlarged, or doubled, hee giveth this word of direction Platonon pros ta amphoterata mere, enlarge the front on both sides.

4. The right wing] That which in the English tongue is called a wing, is termed in Greeke Keras a borne. Wee in our warres of ancient time divided our armies into three parts, The vangarde, the battaile, and the reare-ward: and, when we came to fight, set them for the most part in an even front, the battaile in the middle hand, on the right hand, the vangarde, which was called the right wing, on the left, the reare-ward which was called the left-wing. Properly enough for our embattailing. For the battaile is, as it were, the body, and the vangard, and reare-ward, are the wings, which in a manner stick out from the body, and where by the body is supported: that, that we call wings, the *Grecians*, and *Romans* called horns in the battaile. The word Keras significth a point bearing out from the height, or ends, of any thing. It is used for the toppe of Rocks, and of promontories, and such like. And in a Phalange it properly significth the two points (the right and the left) of the wings. The English word wing I am faine to retaine, because it is familiar, and in use. *Alian* heere will have the wings to stretch out from the middle section to either point (the right and left) of the Phalange, under which appellation must fall to the right wing the whole space, that beginneth at the middle interval, and runneth along to the corner of the battaile on the right hand, to the left, all that is comprehended betwixt the same space, and the left corner of the battaile.

5. The middle section] In Greeke it is named Dichotomia: because it parteth, and divideth the Phalange into two even parts, beginning at the front, and stretching out to the reare. And *Alian* in the tenth chapter of this booke nameth it Apotome. But heere hee speaketh of no more intervalls, or partitions, of the Phalange, then of his one in the midst. I would thinke there should be more. *Onofander* faith: let there bee certaine intervalls in your battaile, that if your enemy advance, your light-armed after they have spent their mislike weapons, and before the Phalanges joyne, may retire leasurly in the intervalls, and without disorder come behinde to the reare. For it is not safe for them in retiring to fetch a compass about the whole army, or to turne in againe on the outside of the wings. For the enemy, having to come to hands, would early prevent, and intercept, them in the midst: so that they neither should bee able to break through the armed, already closed for fight, and falling upon their owne weapons, they must needs disorder their owne people, every man after other seeking to finde a way through them to escape the danger hee is in. Thus much *Onofander*: from whom wee may learne, both that there ought to be more sections in the Phalange, then one, and that the institution of them had this cheefe end, to receive the light-armed in their spaces, after they had skirmished with the enemy, and were by them forced to retire. I may add, that *Alian* placing the light-armed in the reare of the Phalange if you give but one section unto it, it will be as hard for them, to advance, and frue, before the front, as it will bee to retreat after their service done. It seemeth, that *Leo* giveth three intervalls to the Phalange of the ancient Tactics. He faith, that they opposed the bodies of the armed against the enemy, and divided them into foure parts, the right, and left, and the middle-right, and middle-left parte. Making so many parts, the parts must be distinguished (as I collect) by intervalls, which ought to be one after

b Onofander. cap. 10. Leo. cap. 5. § 1

a Leo. cap. 5. § 1

after the first body of the right-wing, another after the second, which is the middle section, the third after the third. And the Third section is bounded with the fourth body, which maketh the point of the left-wing. For if the Phalange were whole, and entire, without more intervalls then one, how could there be four parts? For esteeming them by Phalangarchies, without leaving spaces between, it could not be faide, there were but foure parts of the Phalange, considering, that as well the Merarchies, Chilharchies, Pentecostarchies, Syntagmaticas, as parts of it, as the Phalangarchies, But being distinguished by partition of intervalls, the foure Phalangarchies become foure parts, namely, the right, left, middle-right and middle-left: as *Leo* heere termeth them. The same *Leo* speaketh after more plainly, employing his generally to sperate, and disjoine Diachorizem in the whole number of his arme into foure parts. For, as *Choris* significth apart or severed, so Diachorizem, being derived from it, significth to put asunder, or sette apart. *Suidas* is yet a little more cleare. A Phalangarchie, saith he, is two Merarchies of foure thousand and ninety six men. This as some saye is the section, *Apotome*, and the commander Strategos, but now hee is termed Phalangarchie. *Suidas* maketh the wing to have a partition or section, and saith, some call a Phalangarchie by the name of this section. Before we heard out of *Alian*, that the wing (right or left) did stretch out from the middle section to the outwardmost point of the battaile on either side. And as the middle section divideth the Phalange in two parts, which are called wings, so this section (spoken of by *Suidas*) being in the midst of the wing divideth the wing into two parts. To call a Phalangarchie (which is a body consisting of foure thousand and ninety six men) a section, is, I confesse, an improper speech, but tolerable notwithstanding, considering that the whole foure-joide Phalange is composed of the foure Phalangarchies, and that the section of the right-wing beginneth at the left hand file, or inward point of the right hand Phalangarchie, and endeth at the right hand file of the second Phalangarchie. And we are not to expect the same exactnesse of speech from *Suidas*, that is common to men skillfull in the liberal sciences. Souldiers, that profess action, have their end, if they bee under stood of those, then commande. Attitudes are contemned, that cleve not the precepts of their art with elegant, fit, and exact termes. Seeing then the beginning of the section of the wing is at the flanke of the first Phalangarchie on either side of the Phalange, wee may after a sort terme the Phalangarchie a section of the wing, because it boundeth the section. At least by this place of *Suidas* wee may gather, that there was an intervall in either wing, which in reason ought to bee in the midst of the wing, and to lye betwixt the two Phalangarchies. For so many there are in one wing. *Polybius* telleth of *Philopamen*, that, fighting against *Antiochus* the Tyrant of *Lacedaemon*, after hee had placed the light-armed, the Lanciers, and *Illyrians* in one front, hee added in the same right line the Phalange distinguished into bodies according to Merarchies and divided by severall distances. I translate *Speridon* distinguished into bodies, because *Speira* significth a military body amongst the *Grecians*, and is by the *Grecians*, that wrote the *Roman* histories, used sometime for a Legion, and sometime for a Cohort. And it seemeth that *Speridon* is heere by *Polybius* put in the same sense, that *Eis* *Speiran* is by *Plutarch*: who mentioning the reformation touching affairs military thus: there manner and forme of embattailing was not usually parcelled out *Eis* *Speiran*, that is (as I interpret it) in severall bodies, but in a Phalange.

a Leo. cap. 5. § 1

b *Suidas* in the word Phalangarchie.

Polybius, lib. 2. cap. 11. § 2.

d This in *Platon*.

Phalange, which had neither protection of pikes, nor closing of targets in front (as the Macedonian manner is) they were easily foiled, and broken, by the enemy. The meaning of Plutarch is (as I conceive) that the Achians in former times used to order there Phalange in a continued length without intervalls which Philopamen reformed, and taught them to make divisions by intervalls; And the practise of Philopamen is the best interpreter of his owne counsell to the Achians. This practise Polybius setteth downe, to bee the division of his Phalange Kata tele speiredon en diafemasi into bodies distinguished by intervalls according to Merarchies. Polybius also, to shewe, what bodies they were, useth the word Tele, which I translate Merarchies, having my warrant out of ^a *Alian*: who saith a Merarchie consisteth of three Chiliarchies, and containeth two thousand and forty eight men, and a hundred and twenty foure files; and addeth, that it is of some called a Telos, and the leader a Telarch. ^a *Alian* may doubt seeing Philopamen made an intervall betwixt every Merarchie, whether hee made seven divisions, or no: For in *Alians* Phalange there are eight Merarchies, betwixt every of which is a distance were, there must needs arise seven intervalls. To cleare this doubt wee must understand, that the Phalanges of the Gracians were not alwaies of the same number, as I noted before. *Alians*, and the Macedonian Phalange, consisted of sixteen thousand and odd. *Antigonus* had but ten thousand. Demetrius eleven thousand. Other had more, the Lacedaemonians lesse, and likewise the Gracians for the most part. And as for the Phalange of Philopamen was no more, then eight thousand, and odd, in which number there are but fower Merarchies. As *Alians* Phalange comprehending sixteen thousand and odd, wherein are fower Phalangarchies, hath likewise three divisions by Phalangarchies. And yet in this Phalange of Philopamen, if you account the file to have but eight men (as the most Gracians use in their files to have) these fower Merarchies will possess as much ground in front, as the Phalangarchies of *Alians* Phalange doe, the file being sixteen. Neither is it new to figure out the bodies greater, or lesse, according to the number of the Phalange. ^b *Leo* commandeth his Generall, when the number will not reach to sixteen thousand (the number of the old Phalange) to bound notwithstanding sixteen men in a file, and to divide his Phalange into fower equal parts by intervalls, excepting some few, which hee would have reserved for other uses. To conclude *Alian* him self seemeth to acknowledge more sections, then one, when in the tenth Chapter of this booke hee speaketh of the middle section mese apotome. For this word middle being a relative, can not bee understood with out two other at least, which are placed on either side. And all the figures, that I have seen, of a foursold Phalange, allowe three sections, and no more, that is to say, one in the middle, and the other two in the wings. What the distance and dimension of these sections ought to bee, I finde not set downe. But, if I might have leave to conjecture, I would thinke, they ought to bee large enough for a troupe of horse, framed wedge-wise, after the Macedonian manner, to passe through, the last ranke whereof being fifteen (as appeareth in the twenty chapter of this booke) and the horse placed in the reare of the light-armed it is needfull, if upon any occasion they were to bee drawn through to serve in the front, the distance of the section should bee sufficient to give them passage without disorder. And I am the rather confirmed in this opinion, because I see the intervalls betwixt the Roman maniples so proportioned, that the Principes might passe through those of the Hastati, and the Triarii through those of the Principes. But I proportioned out the intervalls to the horse, not to the light-armed, for that the light-armed may bee divided into severall bodies without inconvenience, but any breaking of the horse.

^a *Alian* heere
sayes.

^b *Leo* sayes, a. g.
c. 11. 12. 13.

horse wedge breedeth a confusion in the whole troupe. Yet where a troupe of horse may finde way, there may a Centurie, or Colours, of light-armed finde also way.

6 The light-armed are placed after. The light-armed were diversly placed, sometimes before the front of the Phalange, which kind of placing is afterward called Prataxis, sometimes on the wings, and it is called Hypotaxis, sometimes betwixt the files of the armed fronting in a right line with them, and it was called En-taxis, sometimes in the reare after the Phalange, which was called Epitaxis. All these are spoken of by *Alian* hereafter in this booke. There is another kinde of placing the light-armed, when they are throwne into the midst of the battaile, being hollowed for that, and other purposes. Hereof *Alian* likewise treateth in this booke hereafter. And albeit the most usuall embattailing of them hath beene in the wings, yet the bestowing in the reare according to *Alians* minde hath also advantages. First it concealeth their number, which because they are shadowed with the pikes standing before, can hardly bee discerned. Then it is a defence from the reare to drawe them to any place of service without disorder, bee it before, on the wings, or behind the reare. Further, it will not bee easie for the enemies horse to charge them, the armed standing before for a sure defence. Lastly, from the reare they shall bee able at all times to annoy the enemy, before the battaile joynes, as soon as the battaile joynes, and all the time of fight. Neither doth this manner of embattailing want examples of the old historie of the Gracians. The embattailing of Cyrus the elders armie, in Xenophon, hath the light-armed in the reare. I will set downe the effect of Cyrus words at large because they containe the ordering of an armie to fight according to the judgement of Xenophon. Cyrus then being to trye a battaile with Cræsus thus directeth his Commanders: you, saith hee, Araspes take your place in the right wing, as you now doe, and you the other Myriarches, as you are accustomed. For when the fight is once a foote, noe Chariot may change horses, and command the Taxiarches, and file-leaders, to order their files every one divided in two parts Phalange-wise, that is each half fronting one with another in a right line. A file containeth fower and twenty men. Then saide one of the Myriarches, doe you thinke Sir, that wee shall bee able, in this order, to encounter so deepe a Phalange, as the enemies? Cyrus answered, the Phalanges that are deeper, then may with their armes reach the enemy, are they fitt think you either to annoy the enemy, or procure their friends? For my part I could wish those, that are ranged soe in depth, to bee in depth a thousand. For so should wee have the fewer to fight with all. The number, that I give for the depth of the Phalange, I doubt not, but will entirely serve for use, and maintaine a joynnt fight in every part. The Darters I will place after the armed, and after the darters the Archers. For who will sett them in front, that confesse themselves vnable to maintaine a fight hand to hand? Howe then will they hold their ground, if they bee sett before the armed? but being in the reare, some with darts, other with arrows, sent over the heads of the armed, will greatly endamage the enemy. And it is cleere, that wherewithall soever an enemy is endamaged, with the same a mans owne side is eased, and relieved. You therefore order your selves, as I have appointed. As for the captaines of the Targetiers I will haue them, and their files, stand likewise next the armed in the Reare, and after them the Archers. And you the chiefe Commander of the Reare

^a *Alian* sayes.

^b *Alian* sayes.

^c Xenop Cyrop.
lib. 1. 10. 2. 3.

enjoyne the other reare Commanders every man to haue an eye to those vnder him, that they doe their duties. And let them sharply threaten the negligent, and in case any man treasonably forsake his place, punish him with death. For it is the worke of Commanders both with word, and deed, to encourage those, they command, & to make the cowards more afraide of them, then of the enemy. This is your charge, but you Euphratas, that command over the Engines, see that the beasts, that drawe the Engines, and Turrets, followe the Phalange as neere, as may bee. And you Daouchus, that haue the charge of the baggage, come with your manye next after the Turrets, and let your Sericants seuerely punish them, that hast to much before or come to slowly after. And you Carduchus, that rule the wagons, wherein the women are, order them next the baggage. For all these, comming in the reare, will both breede an opinion of multuode, and giue vs meanes to lay an ambush, and will force the enemy, purposing to encompass vs, to fetch a larger compasse, which the larger it is, soe much the weaker must hee bee. And you Artabafus, and Artageras, each of you leade next after the 1000. foote you commande a piece. And you Phranuchus, and Asiadatas, order the Chiliarchies of those you commande not with the Phalange, but fet them by themselves apart behind the wagons; and when you haue done it, repaite to vs with the rest of the commanders. But you are to bee in a readinesse, as if you were first to fight. And you the commanders of the Camel-riders place your selues after the wagons, and doe what Artageras shall bidde you. And you the Commanders of the Chariots, after lots are cast, let him, whose lotte it is, range himself, and his 100. Chariots, before the Phalange, the other two hundred, one of them is to follow the Phalange on the right side, wing-wife, the other on the left. So farre Cyrus. I haue rehearsed the words at large, principally to shewe that the light-armed in ancient time were placed sometimes behind the Phalange; and yet further also, to represent the manner of embattailing an armie, which was then vsuall. For heere haue you set downe the place of the Myriarches, & of the other commanders, which was in front, then the place of the pikes, of the light-armed, of the reare commanders, of the Engines, of the baggage, of the wagons, wherein the women were, of the guards for the baggage, both horse, and foote, of the Camels, and of the Chariots. And albeit many of these particulars agree not with our manner at this day (for wee haue neither Engines, nor Camels, nor Chariots, nor lings, nor darts, nor arrows) yet is the reason of warre alike in all, and in our placing also the Rhetoricke of seruice principally to bee respected. The place of the horse is here omitted by Xenophon, which may be supplied out of the seventh booke, where Chrysanthus General of the horse is said to stand on the right wing of the Phalange with half the horse. Hyllaspas on the left with the other half. But to returne to the placing of the light-armed, the same Xenophon testifieth, that it was the Egyptian manner to order their light-armed behinde, & that in the battaile betwixt Cyrus, and Crasus the Egyptian archers, and darters, were with drawne (swords compelled by the reare-commanders to shote, and cast their darts. Thababulus in his fight against the thirty Tyrants set his armed in front, and in the reare his targetiers, and darters, without armor, and those that cast stones. And it seemeth by the words of Thababulus to his owne side, that the Tyrants did the like. The Tyrants, saith hee, haue brought vs to a place, in which by reason of the steepnesse, they must ascend, and can neither cast stone, nor dart, over the heads of their owne people, that are embattailed before. Where wee contrarywise, whether wee throwe jaucelins, or darts, or stones, shall easily reache, & wound many

a Xenoph. Cyrop.
lib. 7. 172. C. &
173. C.

b Xenoph. Cyrop.
lib. 7. 179. A.

c Xenoph. Hist.
gener. lib. 1. 47. D.
d Xenoph. Hist.
gener. lib. 1. 47. C.

many of them. The stones and darts of the light-armed were to flye over the front of the battaile, and that could not bee vnlesse the light-armed were placed behinde, I will adde one example onely out of Plutarch to shew the seruice of the light-armed in the reare. Plutarch discourses of the battaile fought betwixt Sylla, and Archelaus, the Gene. a Plut. in Sylla. call of Mithridates, at Cheronaa, hath thus: Afterwards the foote forces came to joyne, the Barbarians holding out, and charging their long pikes, and endeavouring with locking their targets close together, to maintaine the order, and closenes of their Phalange: The Romans on the other side, casting away their darts, and drawing their swords: putte by the enemies pikes in choler, to the end they might come quickly vp to them. For they espied, opposed against them in front 15000. of the enemies files, that were enfranchised by Proclamation of the Kinges generalls: & enrolled amongst the armed. And when the Roman Army could hardly breake them, by reason of their depth, and fast knitting together, and of their bouldnes in daring (contrary to the nature of slaves) to abide the danger of this encounter, the arrows, and darts cast in abundance from the Reare, made them shewe their backs, and fall in a route. Wee finde here, that the light-armed from the reare effected that, which the Armed could not. These slanes endured the shocke, and could not bee broken by the armed, and yet were defeated with Arrows, and darts, from the Reare: Nowe for the distance that should bee betwixt the bodies of the light-armed, and betwixt them, and the reare of the armed, Elian saith nothing: I make no doubt, but there ought to bee as great (if not greater) as in the sections of the armed. For we must understand, that the sections, that served to sever the Phalangarchies one from another, must runne through the light-armed in depth to the reare. And by them are the Epixenagies to bee deuided a sunder, as the Phalangarchies are: with Epixenagies answer the Phalangarchies for number of files, albeit not in number of men. Likewise there ought to bee, a greater space in ranke, and file, then the armed had. For the handling of misse weapons, require more liberty of place, then the managing of a pike, or sword. A dart can not bee sent for cible without running two, or three, stappes in the delivery of it. A sling being throwne, and circled about the head, before the stone, or bullet, can bee forced out to any purpose, will not suffer a neere stander by. In bowes, and arrows, is the like reason, if they be used as they ought. Besides the light-armed, in their fights are tied to one certainty of order, or ground, but fight disorderly: See that the more ground they haue, the fitter they are for seruice. In which respect a large intervall crosswise betwixt the armed, and them, should be true to purpose: it having liberty for their motion forward, and backward, as occasion should require.

7. And behinde the the Horse. I haue not read in any greek historye, that the horse-men in a set battell, haue beene ranged behinde the light-armed. The usual manner was to place them in the wings. Soe did Alexander before hee passed the River Cyrenicus: Soe did Antigonos, against Eumenes, and Eumenes against Antigonos: Soe Ptolemus against Demetrius, and Demetrius against Ptolemus: and in briefe all the Macedonians, and the Gracians, before the Macedonians were accounted of for matter of armes: vnlesse some speciall cause moued an alteration. And, as I shewed out of Xenophon, before all their times. Cyrus albeit, hee set the light armed in the reare, notwithstanding hee bestowed the horse in the wings: Alexander having passed the River Isser as long as hee marched in the corne land, placed his horse behinde his Phalange, when hee entred the Champeigne, hee set them on the right wing: and lastly cast his Phalange in to a Plafum: and ordered his horse before. In the Corne land, they followed (for feare of an Ambush) in the Champeigne they marched on the

b Xenoph. a. 6. 5.
c Arrian. lib. 1. 12.
d Arrian. lib. 1. 12.
e Arrian. lib. 1. 12.
f Diod. Sicul. lib. 19. 1.
g Diod. Sicul. lib. 19. 1.
h Xenoph. Cyrop. lib. 7. 174. C.
i Arrian. lib. 1. 12. D. E.

right wing, because on the left, the Phalange was secured by the River; before the Platoon, that being over-Laid with the multitude of the enemy, they might have a sure retreat to the foot. The same Alexander, when he was to fight the Battle of Issus with Darius, as long as he was in the freight, marshalled his horse after his foot. But in marching forward, coming to open ground, when he might give full length in his Phalange, he placed his horse on both the wings. But the reason of sitting them behind was in the streights of the place: and he being incertain how were the enemy lay, was loathe to put them to hazard, before they had liberty of grounds to order their flanks, and might have assistance of the foot. For otherwise it was an ordinarie matter in marching (as it is the manner also at this day) to dispose the horse half behind, and half before, as it will content my self with one example. When Agellus returning out of Asia, passed through Theffalia, the Theffalians, allies of the Thebans, followed him, and sought to endamage his armie to their vttermost. Hee had before disposed his march into a Platium, with the horse half in front, and half behind, now when the Theffalians ceased not to molest him, by falling vpon his reare, he sent to the reare all the horse of the vanguard, excepting those, that attended his person. Either party prepared them selues to fight. The Theffalians holding it not sure with horse alone to encounter armed foot: turning about their faces, began leisurely to retire, and the Lacedaemonians slowly to followe. Agellus, perceiving the error of both, sent the best of his horse, that were about him, commanding them to signifie to the rest, that they together should goe, and charge the Theffalians with all speed, and give noe respite to them, to turne their faces. The Theffalians contrary to their expectation being hotly charged, some fled, other some turned about towards the enemy, other some endeavouring to turne, were surprised by their enemies, that by that time were come vpon to their flanke. Now for the reason of Alians placing the horse in the reare, I have no more to say, then, that from thence they might be soone drawn to all places, front, flanke, or where soever the enemy is like to distresse vs. For it hath bene the foresayd, of all generals to follow their battails according to the figure the enemy hath before chosen. Examples are so plentifull, I neede not allege many. Onely I will remember one latine story of placing horse in the reare. L. Lentulus, and L. Atanlius Acidinus in Spaine being to fight with the Illegeres, and Ansfans, and other Spaniards, that had revolted from the Romans; in this very kinde of placing horse in the reare imitated, and gotte the advantage of, and defeated their enemies. Livy hath the story, and writes thus in effect: The next day at the rising of the sonne the Spaniards being all armed, and set in order, shewed their battail, about a mile from the Roman campe. The Ansfans were in the middle left: Betwixt the wings, and the middle parte, they left broad interualls, to give passage to their horse: (when time should bee) to send them through imitated the enemy, in leaving open waies, for the horse betwixt the legions. Lentulus imagining that party, and none other, should have vae of their horse, that first possessed the interualls of the horsemen, presently to charge through, the foot on both sides came to blowes, and the fight was hard, when the Roman horsemen passing through the spaces, and falling vpon the middle of their enemies at once disordered the battail of foot and shut vp the waies against the Spanish horse; by which meanes, after noe long fight,

Arrian lib. 1.
The like was done by M. Var-
ianus the Dictator
against the Iu-
deans. Livy de-
scribes it.

Xenoph. hist.
lib. 4. c. 19.

Livy Cæsar 1.
lib. 4. c. 19.
The like was done by M. Var-
ianus the Dictator
against the Iu-
deans. Livy de-
scribes it.

fight, the enemy was vtterly defeated. Where Livy saith the Romans embat-
tailed after shewd manner, his meaning is they ordered them selues in Maniples,
or Battalions, as we now terme them (for that was their woone.) But when hee ad-
deth, they imitated the enemy in leaving open waies for the horse, betwixt
the legions. We must understand that a legion was thus embattailed: First they di-
vided their legion in to thirty Maniples, ten of the Hastati: ten of the Principes, and
ten of the Triarii. The ten maniples of the Hastati, they set first in an even front, leaving
so much distance, or void ground betwixt every Maniple, as a Maniple is self took
up in standing. At a reasonable space behind, were the Principes placed in as many ma-
niples: but soe that their maniples stood directly behind the void spaces of the Hastati.
And against the bodies of the hastati, they left likewise spaces in the Principes to the end,
the Hastati being overlaid, might retire without chafe: or else themselves might ad-
vance against the enemy, through the interualls of the Hastati. Lastly as a larger distance
behind these were the Triarii set, and divided with spaces betwixt every maniple, which
spaces were great enough to receive the Principes, in case they retired also. Now the horse
being ordered in the reare after the Triarii, if from thence, they had gon to charge the En-
emies front, through the spaces of the Triarii, they must of necessity, have fallen vpon the
Maniples of the Principes whose were set directly against the interualls or spaces.

To give therefore free passage to their horse, the Roman Generals removed the maniples
of the Principes from their ordinarie place, and bestowed them, in a right line, after the
maniples of the Hastati, and made an open lane, (as it were) from the reare of their battail
to the front. So that nothing hindered the horse, they might freely fly up to, and fall vpon
the enemies front. And yet I take not Alians meaning, to be, that the horse set in
the reare, should during the time of the fight still remaine there. For soe would noe ser-
vice bee had of them. But hee placed them there the rather to avoide confusion in ordering
the foot. And that after their embattailing they might bee led from thence to any place,
front, or flanke, or where soever they might be led most use. For in the fifteenth and twen-
tieth chapter, he would have both light-armed, and horse soe placed, that they might answer
all attempts of the enemy. And in his caution following, hee saith, if occasion require
both horse and light-armed, may be otherwise placed. That they were just-
ly placed in the wings, I have before shewed. The examples declare they were placed in the
reare sometimes:

Of placing in the front there are also examples. The Lacedaemonians at the battail of
Leuctra against the Thebans placed their horse before their Phalange, and tried their for-
tune with them, and were beaten, before the foot ioyned. The Persians at the River Gra-
nicus, seeing their horse to be their chiefest strength, opposed them vpon the banks
against Alexander, that was to passe over, and embattailed their foot behind the horse.
And Alexander encountered them first with his horse, before his foot could get over: One
example more I will adde to shewe the reason. Why horse are sometimes placed before
the front of the Phalange of foot. Eumenes being to fight against Craterus, and Nectopolemus,
the both great generals, that had served vnder Alexander in all his wars, ordered the fight
thus: Because hee vnder stood, that their Army consisted of twenty thou-
sand foot, the most part Macedonians renowned for their valour, and
showd hand horse, and knewe his own foot, albeit they were as many in num-
ber, yett all to bee ramasses of diuers kinds of people, and that his own horse
were fewe thousand, with exceeded the enemy both in number, and valor, hee
determined to hazard the battail vpon his horse, before the two Phalanges
of foot should come together: Advancing therefore with his horse farre before
his

Livy de-
scribes it.
lib. 4. c. 19.

Xenoph. hist.
lib. 4. c. 19.
Plutarch in Al-
ex. lib. 1. c. 14.

Plutarch in Al-
ex. lib. 1. c. 14.

his foote, hee tooke the right wing himfelfe, and gaue the left to two strangers, to Pharnabazus a Persian the fonne of Artabazus; and to Phenix a Tenedian. Craterus stood in the right wing of his owne horfe, and placed Neoptolemus on the left. And seeing the enemies horfe comming forward, with greates fury charged them first, and fought bravely. But his horfe failing vnder him, hee fell to grounde, and it being not knowne, who hee was by reason of the medly, and throng of thofe, that gaue backe, and fled, hee was trampled vnder foote, and ended his life after a strange manner. By his death the enemy tooke courage, and encompassing their aduersaries on all sides, made a great slaughter, and the right wing, after this manner, with might overpressed, and put to the worst, was faine to fly for succour to the Phalange of foote. In the left wing Neoptolemus stood directly against Eunenes, and the mutual fight of ebbe bredde a greates emulation betwixt the *generalls*, and a fervent desire to come to hands. And being easily knowne, both by their horfe, and other marks, they slew one vpon another; and out of their single fight made away to a consequent victorie. And first they assailed one another with swords, and after fell into an vnlooked for, and wonderfull Monomachy, for being transported with anger, and mutual hatred, quitting the raines of their bridles, with their left hands they each seized, and tooke hold vpon the body of other, which hapening, and the horfe continuing their carare, and springing from vnder them, they both fell to the grounde, neither of them could wel arise by reason of the suddaine, & violent fall, and of the heaviness of their armor. Yet Eunenes got vp first, and prevented Neoptolemus, striking him on the ham. The wounde was wide, and his strength of footing thereby failed, & soe lay as one, that had noe vie of his legges, being not able to raise himselfe because of the hurt: notwithstanding, courage overcoming the weaknes of his body, hee lift vp himselfe vpon his knees, and hurt his aduersarie in the arme, and thighes, giving him three wounds. But none of the wounds were mortall, and they being yet warme, Eunenes with a second blowe hitting his necke, slew Neoptolemus outright. Whilest these things were doing the rest of the horse fell together. Many were slaine on either side: some therefore falling, other being wounded, at the first the daunger was equall. Afterward, when the death of Neoptolemus was openly knowne, and that the other wing was put to flight, euey one shifted for himselfe, & made towards the Phalange of foote, as to a liueing wall of defence to saue himselfe. *This was the issue of the battaile. Wherin Eunenes, placing his horfe before his foote, because hee held them his strength, and with the winge the hazard of the day, shewed him selfe, both in counsell, and action, a greates general.* And Craterus on the contrary side, albeit highly esteemed amongst the *Maccedonians*, as one, that had with great sufficiency served Alexander in all his warres, yet failed in iudgement, in that hee chose rather with his horfe to encounter the stronger parte of his enimies forces, then with his *Maccedonian* Phalange (which Eunenes himselfe feared) to trie his fortune. For as it is a pointe of forsaet to knowe a mans owne advantage, and esteeme Eunenes did both: for hee reied his owne wherin the enemy is stronger, and avoyde it past, that Craterus his Phalange did him noe good, in as much as they never came to fight. Craterus failed in both, in that hee neither brought his Phalange to fight, nor yet provided sufficientlie to encounter Eunenes horfe, which exceeded his in valour, and number; so appeares both, that horfe were placed before the front of the foote, and also the *horie* gives therewith, why they were placed there.

of

Of the number of the armed foote, of the light-armed, and of the Horfe.

CHAP. VIII.

NOW are wee to lay out, what number the *armed-foote*, the *light-armed*, and the *Horse* ought to bee, and how particularly ordered, and how vpon occasion the *Battaile* may speedily be transformed into diuers shapies, & formes, and what discipline vied for the motion of the severall parts of it. Wee can not with any probability set downe a precise number of forces to be leved. For as much as euery man is to proportion his levie according to the importance and qualitie of the warre in hand. This yet must not escape vs, that such a number is to bee chosen, as will fitt the diuers shapies, and transmutations of our *Troopes*. As if in case wee were to double, or to multiply, and manifoldly enlarge the length of the *Phalange*, or els to lessen, and drawe it vp into a narrower roome. For this cause choice is made of a number, that may be, reported into half continually, till you come to one. Hence is it, that most *Tactick* writers would haue a *Phalange* to consist of sixteen thousand, three hundred, eightie, and foure armed foote, and of half so many *light-armed*, and of halfe as many *Horse*, as *light-armed*. For 16384. may be reported continually into half, till you come to one. Therefore for prooffe, and Examples like this numbers is admitted. And where wee haue allotted sixteen men to euery file, the whole masse will arise to one thousand, twenty, and foure files.

Notes.

THE Chapter before spake of the parts and dimension of the *Phalange*, and of the place of the armed, the horfe, and *light-armed*. This treateth of the number that goeth to the *Phalange*. In choice of which number, *Aelian* faith consideration is not soe much to bee had of multitude, as of times for service. For such a number as cannot aptly be disposed of for fight, is rather meanes of confusion, then of order without which no fight can be maintained. Therefore such a number is to bee chosen as will serue.

1 The diuers shapies, and transmutations of our *Battaile* Every motion in the *battaile* makes not a Transmutation, or diuersitie of shapies. In turning of faces to the one hand or other there is no other shapies of the *Phalange*, then was at first: As a man turning his face any way, the same proportion of lineaments remains that was in him before. Soe likewise in counter-march or wheeling after the Counter-march, or wheeling is done, euery souldier if hee keep his right distance, and remaine in file and ranke; both the place hee had before. And soe noe transfiguration of length or of depth followeth. The motion then, that *Aelian* meanes to make Transmutation, are Doublings: For whether you enlarge the length, or depth of your *Phalange*; you straight induce another shapies. A long fronted *Phalange*, and a thicke differ much in forme. If you will make of the ordinary *Phalange* a herse, you are to double your files soe often, as your thicke convenient for the length of your herse. Then if from the Herse, you would returne it to the first forme, you are not to cease doubling Ranks, till you haue gained that forme: likewise if of your ordinary *Phalange*, you would make a long fronted *Phalange*, your ranks are to bee doubled, and by continuing your doublings, you may drawe out what length you will. And

contrary

contrarywise, by due doubling your files againe, you come to the first forme: How much you double your Ranks; Soe much you take away from the depth of your Phalange; as on the other side, doubling of your files, diminisheth the length. For the purpose, your Phalange is sixteen deep, double your Ranks; the depth hath but eight men; double it once more, and it hath but foure. Soe is the Phalange consisting of foure ranks, & every ranke, hath foure thousand, and ninety six men in it: But the length is foure times as much as it was. In like manner doubling your files (which in *Ælian's* Phalange are a thousand, and twenty foure) the first doubling loveth five hundred, and twelue files, and five many remayne; the second seven hundred, and sixty eight, and two hundred fifty five remayne; and soe many men haue you in a ranke. But where the Phalange was but sixteen deepe, nowe in the second doubling it is become sixty foure deepe: If you please to reduce it to the first forme, two doublings of ranks will suffice. Here we must understand that doubling ranks, is not to make twice soe many as they were before, but to give twice so many men, to every ranke, as they had before by insetting the even ranks into the oddes; as the second into the first, and the fourth into the third, and the sixth into the fifth, and the eighth into the seventh, &c. The use of doubling I will shew in my notes upon the twenty nine chapter of this booke. *Ælian* therefore would haue his Phalange, of such a number as may be reparted continually into halfe, till you come to one; which number hee saith to be sixteen thousand three hundred, and eighty foure. And yet ariseth out of the Multiplication of one by two for still doubling the product, till you haue made up the full number, of sixteen thousand three hundred, and eighty foure. And as the Multiplication by two begett this number, soe it being divided by two continually, it may be reduced at last to one: which is the thing, that *Ælian* ayms at. For the numbers, shat haue no equall division by which leaue some supernumerary men in the Phalange; (which) in doubling will disorder both files, and Ranks: Every man acquainted with the done country military exercise at this day, knoweth, that when there is an uneven number of files, the odd file supernumerary brings a difference, and cannot be doubled in the sort as the rest are: As in five, seven, nine, eleven, &c. several bodies of files: Two, six, eight, ten, may well be doubled, and become two, three, foure, five files a piece: but the fifth, seventh, ninth, eleventh, must be severed from the rest of the doubled files; and serve to no purpose, being not matchable in depth with the rest after their doubling. The same reason is of ranks: Now when *Ælian* saith, that this number in a Phalange may be divided by halfe and reduced at last to one, we must with all understand, that the file of the Phalange in such division, ought to be either of eight, or sixteen men a piece. For no number under eight, except foure, or two (which saith not the depth, of a Phalange) nor between eight, and sixteen, is divisible by halfe, till you come to one. Nor nor above sixteen except it be produced out of the duplications of sixteen, a file of 12, comes nearest. And of that number was the file of Cyrus in Xenophon. Such a file notwithstanding by division of two staies at three, and can defend no lower. Ten was the old file of the Grecians, and it was called "Decas." And albeit after ward upon better consideration they enlarged the number of the file to twelue, yet they retained the name of Decas still. But ten receiveth but one division, and goeth downe ward no further then five. The uneven number, under sixteen cannot be divided at all, Files by fraction. As thirteen, which if you will divide by halfe, the quotient will be six, and there remaineth an odd man over: of which number, if all the files of the Phalange should be, you should haue a thousand, & two hundred, and sixty, which will receive no more, then 2 do doublings without a fraction. If then the file be above sixteen, and under thirty 2 you, cannot divide them continually by halfe, but you must saile of the manner, that *Ælian* speaks of. As for the number of sixteen thousand, three hundred, and eighty foure, albeit it is self, it is divisible by 2 two till you come, or ascend

a Xenop. Hyst.
lib. 2. c. 11.

to 1, yet we must not consider it apart, as an abstract by it selfe, but as it numbereth, and is applied to the Phalange. In which respect, it reacheth a 1024 files of 16 deepe, which files will still hold out the doubling, till you come to one file.

3 A Phalange consist of 16384. *Ælian* (out of the most *Tactick* writers as he professeth) will haue the Phalange of sixteen thousand, three hundred, eighty and foure men. I haue noted before that a Phalange may be more, or lesse, than this number. But take this to be the number of the Macedonian Phalange. * Appian seems to testifie a Appian in which the chiefeft strength was the Phalange of Macedonians, containing 16000 men, ordered according to the forme, that Philip and Alexander had before used. He placed them in the middle, dividing the 16000, into 10 equall parts, in every of which parts was 50 men in front, and 32 in depth, and vpon the flanks of every part 22 the shew of the Phalange was like a wall, of the Elephants like turricets; hitherto Appian. I haue translated He Phalanx, He Macedonon according to the word, the Phalange of the Macedonians, where the right meaning is, the Macedonian Phalange. For it consisted not of Macedonians, but was armed, and ordered, after the Macedonian manner. For how was it possible for Antiochus to wage, and haue in his service 16000 Macedonians, being neuer himselfe King of Macedonia, and the King, that then was (namely Philip the sonne of Demetrius) was his enemy, and in league with the Romans? Besides Appian hath in expresse words: the Phalange was armed, and ordered, according to the institution of Philip and Alexander: whose manner Antiochus might well retaine, considering he was lineally descended from Seleucus, the successor of Alexander in the kingdom of Asia: And Seleucus had bene in the service of Alexander in the whole conquest of Persia. * Liuy saith also, they were armed after the Macedonian manner. Whereby a man may inferre, they were no Macedonians: Hee speaking of the same battaile (which was the battell of Antiochus against L. Scipio) hath thus: The Kings army was mingled of sundry nations, and diuers with dissimilitude of armes and aides. There were 16000 footearmed after the manner of the Macedonians. They were called Phalangites. This was the middle of the battell, and in front diuided into 10 parts, which parts were distinguished by placing 22 Elephants in each interuall. The battell had 32 ranks in depth. It was the principal strength of the Kings forces, and both with the other shew, and also with the Elephants, which were eminent amongst the Armed only, brought with it greater terror. Liuy saith the 16000 were armed after the Macedonian manner, and were called Phalangites: Appian, that there were 16000 ordered, and distributed according to the ordinance of Philip and Alexander. Liuy, and Appian, both agree, that there was 10 parts, and every part seuered with interualls, and had 50 men in depth, which is the Macedonian file once doubled. Liuy speaketh not of the number of the length of the Phalange. Appian saith plainly there were 500 in front, of every of the 10 parts, which amounts to 5000 for 10 times 500 makes 5000. Now if you multiply the length of the Phalange which is 500 by the depth, which is 32, you haue the 16000, wherof Liuy and Appian speake. But yet remaineth a doubt, in the difference between both these authors and *Ælian*. Liuy, and Appian, both giuing but 16000: *Ælian* 16384. I haue noted before that a Phalange may be more, or lesse, than this number, which is the Macedonian Phalange. For Liuy, we are not much to insist upon him, who being a Roman (we may probably coniecture) was halfe a stranger, in the Art Tactick of the Grecians, and that, which he wrote, he had from others; perhaps no better skilled in the same art then himselfe. Appian was a Grecian (for so those of Alexandria in Egypt accounted themselves) after Ptolomy the first had established that Crome in his family and as his historie sheweth, well acquainted with the order the Grecians held in embatling

b Liv. Decad.
lib. 2. c. 11.

ling their armies, and therefore we may the better rely upon his authority. Who albeit hee first affirmed the Phalange was of the number of 16000, yet after in numbering the depth and length alone, he findeth 16000: and further expounding his own meaning he sheweth, there were more upon the flanks of the ten parts, into which the Phalange was divided. His words import: That Antiochus divided his Phalange into 10 equal parts, giving every part in front 50 men, in depth 32, which being multiplica together, make up the 16000. He addeth. And in the flanke of every part be set 22. If the meaning be, he set 22 upon each flanke of every part, the parts being 10, and the flanks 20, the number will arise to 1440, where Elian alloweth no more than 384. But if 22 were added to one of the flanks of each division, which also being collectively taken are flanks in the plural number, we shall come short and finde no more than 220. Yet whether the sense of both you admit, it is plaine, that Appian attributeth more, than 16 thousand, to that Macedonian Phalange. And it may be, there is an error in the number of the 22, and that it ought to be written 32. For if Antiochus had given 32, as he gave 22, to one flanke of every part, and set 32 upon the uttermost flanks of every wing to strengthen them, of the 12 times 32 had arisen the iust number of Elians Phalange; which number is the fittest, for use, and for division of the Phalange in all doublings. The armed foote then, according to Elian, ought to be, 16384. The light armed.

4. Halte so many. The armed among the Grecians, were accounted the strength of the field, which was the cause their number was greatest. For you shall not finde in their battailes for the most part, that the light armed amounted to halfe the number of the armed: The fault of Cyrus sheweth what account he made of light armed: Xenophon reporteth it thus: He led with him the Lydians, those whom he saw to take delight in Armes, horse, and chauiots, and willingly doe, what they were commanded, he gave armes to, of those whom he followed him against their wils, he gave the horses to the Persians, that were his first companions in Armes. All that followed him vnarmed, he exercised to the sling, because he reckoned that weapon most feruile of all others. How much you increase the number of the light armed, so much you diminish the number of the armed, and by consequent so much weaken your field. For the light cannot maintain any stable fight, but in case of danger they are forced either to shew a faire pair of heels, or else retire to the armed for succor: yet serve they for many uses ioyned with the armed. And the proportion that Elian setteth downe, namely to haue halfe as many of them, as there are armed, standeth to good reason, & cle. The Romans notwithstanding, were more sparing in their light armed: as allowed not aloue the 4th part of them, or else more, to the armed. The Legion contained (saith Polybius) 4200 footmen. Of these they chose 600 Triarij, 1200 h. stat. 1200 principes, (which come to 3000) and the rest Velites, which were 1200. And the Velites were the same in effect among the Romans, that the light armed among the Grecians, albeit their arming somewhat differed. Elian before sheweth, that the Grecian light armed had no manner of defensive armour, but offensive only, as bowes, darts, or pikes. Polybius describeth the Armes of the Velites to be a Sword, a Pansa, (which is a small Target), and darts; the sword a spanish sword, the Target a little round Target, a foote and a halfe (for so Casaubon correcteth Tripedon) in breadth; the darts in the stea of foote long, and a finger thicke, and the head almost a foote long. And Livy mentioning the skirmishes, that fell out betwixt the horsemen of King Philip of Macedonia, and Sulpicius the Roman Consul, compareth both the armies together, telling that either party had their light armed ioyned to their horse, and that coming to fight, the Romans had the better. So (saith he) neither the Kings horse, vnaccustomed to a stedfast fight, were able to match the

Roman

Roman horse, nor yet the foote skipping and leaping here and there, and almost halfe naked in their kinde of Armes, to be compared to the Roman scels, hauing a Target, and a sword, and being armed sufficiently both to defend himselfe, and these being ranged behind the armed horse, ought to be 8192, and 1024 files, as many as the armed did.

5. Halte as many horse, as etc. The horse are in number 4096, and proportioned to the foote (comprehending the light armed) as 1. to 6. The armed foote, and light armed together make 24576: the horse 4096. And this was Alexanders proportion, when he moved first against Darius. For he had about 30000 foote, and 5000 horse, or not many more, as Diodorus saith. Iustinius giues him 32000 foote, 4500 horse. Yet this number held not. Imitates amongst the Macedonians themselves; I meane Alexanders Capitaines, that possessed his kingdoms after his death. The reason may be, that in ciuill warres they made their levies, not as they would, but as they could. In the battle betwixt Eumenes, and Craterus, (I speake of that battell before) Craterus had 10000 foote, & 2000 horse; Eumenes had 20000 foote, & 5000 horse. Craterus the proportion of 1. to 10; Eumenes of 1. to 4. Antigonus fighting against Eumenes had as before. Antigonus horse were to the foote, as 1. to 5. The same Antigonus fighting against Alceas, the brother of Perdicas, had in his Army 40000 foote, and more than 7000 horse; the proportion well nigh of 1. to 6; Alceas had no more than 16000 foote, and 900 horse, failing much of Elians number. Antigonus in his second battell against Eumenes, had 28000 footmen, and 800 horse, which is 1. to 3. and halfe; Eumenes had 35000 foote, and 6000 horse, very neare Elians proportion. Many other examples are to be read in Diodorus. But (as I said) these are Rammies proceeding not of choice, but of necessity, which forced them to take such, as came to hand; as it alwaies falleth out in soldaine levies. And it seemeth the number of horse used in it after he receiued his armie from Philip, who by premeditation, and fore choice had gathered it together with intent to invade Persia. And yet I finde that Philip himselfe, when he fought against the Athenians and Beotians at Cheronea, had more than 30000 foote, and 2000 horse, which is 1. to 15; and in diuers other fights differed from Elian in the number both of horse, and foote. But the question is not, what Phalange best, For Philip device being to cast the horse into wedges of 64 horse a peece, and into 64 troops; the greatest ranke of each wedge being 15, with in the reare equal the front of the armed, and of the light armed; not in number of files (for the in quantitie of place giuing to the hoste, standing in their order of 6 foote betwixt man & man, the 128 cubits of surplusage toward the difference of the horses bodies, and toward the small spaces that are to be left, betwixt Troope, and Troope. The Romans allowed a faire leffe rate of horse to the foote. In a Legion, according to Polybius his account, there were of Citizens 4200 foote, and 300 horse; of allies, and confederates 4200 foote, and 600 horse. In a Consular Army were 2 Legions of Citizens, and 2 of Allies, which came to 16800, a number not much differing from Elians Phalange of 4096, (the number Elian alloweth to his Phalange) and holdeth proportion of about 1. to 9. The reason of this difference, may appeare in the fact of Eumenes; who not much trusting his forces of foote against the Macedonians (accounted the best souldiers

The Tacticks

of this age.) prepared himselfe a sufficient number of horse with them to make a counter-balance against the Macedonian foot. And it hath bene the manner of Generalls of ancient time, if they trusted their Foote forces, to make the lesse account of Horse: if they distrust them, to increase the number of their horse.

The Romans trusting to their foot, required the lesser number of horse. The Grecians had the greater number of horse, both for the cause before recited, and further because they had continuall warre with Barbarians, that placed their confidence in horse; as the Persians, and the inhabitants of the lesser Asia.

The names of the severall parts, and of the Commanders of the severall parts of the Phalange, and of the numbers under their commands.

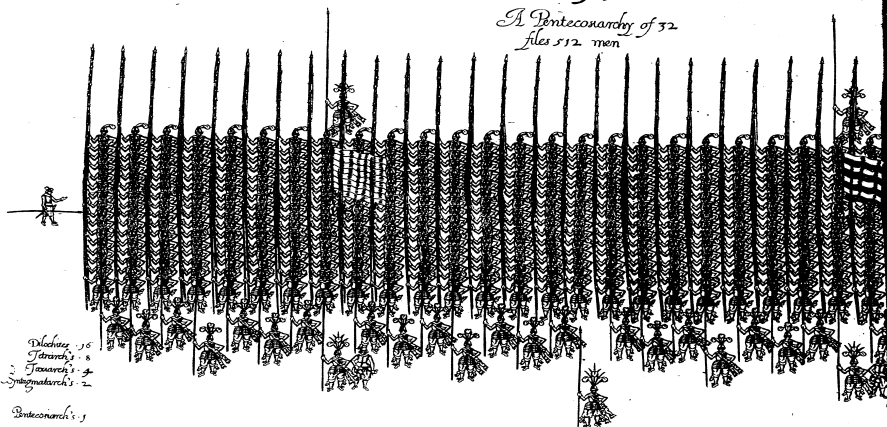
CHAP. IX.

THE files are ordered into bodies, which have every one a proper name. For two files they call ¹ a *Dilochie* of *thirtie two men*, whose *Leader* is termed *Lilochista*. Four files ² a *Tetrarchy*, and the *Leader* thereof *Tetrarcha* having charge over 64. men. Two *Tetrarchies* ³ a *Taxis* of 128. men, and 8. files, and the *Leader* thereof hath the name of *Taxiarcha*. Two *Taxes* goe to ⁴ a *Syntagma* of 16. files, and 256. men; and the *Leader* thereof is called *Syntagmatarcha*. A *Syntagma* of 256. men is called of some a *Xenagys*, and the *Commander* *Xenagos*. In every *Syntagma* of 256. are five ⁵ superordinary men, viz: ⁶ An *Ensigne*, ⁷ a *Reare commander*, ⁸ a *Trompeter*, ⁹ a *Sergeant*, and a ¹⁰ *Crier*. This *Syntagma* seemeth to have ¹¹ a *Tetragonal* forme of 16. men in length, and 16. in depth. Two *Syntagmas* make ¹² a *Pentecostarchy* of 512. men, and 32. files, the *Leader* whereof is named *Pentecostarcha*. Two *Pentecostarchies* make ¹³ a *Chiliarchy* of 1024. men, and 64. files; and the *Leader* is called *Chiliarcha*. Two *Chiliarchies* are called ¹⁴ a *Merarchy* of 2048. men, and 128. files, whose *Leader* is named *Merarcha*. Of some this part is called a *Telos*, and the *Leader* thereof *Telarcha*. Two *Telarchies* make ¹⁵ a *Phalangarchy* of 4096. men, and 256. files, the *Commander* whereof is called *Phalangarcha*. Yet some call it a *Strategy*, and the *Commander* *Strategos*. Two *Phalangarchies* ¹⁶ a *Diphalangarchy* of 8192. men, and 512. files. There are that terme this part ¹⁷ *Meras* and it is one of the wings. Two *Diphalangarchies* make a fourfold *Phalange* consisting of 1024. files, and 16384. men. So have you in the whole *Phalange* of armed foot two wings, foure *Phalangarchies*, eight *Merarchies*, sixteen *Chiliarchies*, thirtie two *Pentecostarchies*, sixtie foure *Syntagmatarchie*, one hundred twentie eight *Taxiarchies*, two hundred fiftie six *Tetrarchies*, five hundred twelue *Dilochies*, one thousand twenty foure files.

Notes.

HERETOFORE beene shewed, the manner of arming, and leyning of *Souldiers*, filing, and the parts of files, the ioyning of files, and raking, the local forme, and parts of a *Phalange*, the number of the armed, light-armed, and horse-men requisite to a *Phalange*. This Chapter contains, as it were, the matter, of which a *Phalange* is compounded; that is the severall bodies *Militarie*, ordered, and ioynd together, to make up the perfect forme of it. These bodies are many, and arise out of ioyning files by doubling
f.12

Cap. 9.

A Pentecostarchy of 32
files 512 men

The Tactics

himself a sufficient number of horse with them to make a counter-Macedonian foot. And it hath bene the manner of Generalls of trusted their Foote-forces, to make the lesse account of horse: if they increase the number of their horse. The Grecians, relying to their Foote, required the lesser number of horse. The number of horse, both for the cause before recited, and further because warre with Barbarians, that placed their confidence in horse, the inhabitants of the lesser Asia.

the severall parts, and of the Commanders of the severall parts of phalanx, and of the numbers under their commands.

CHAR. IX.

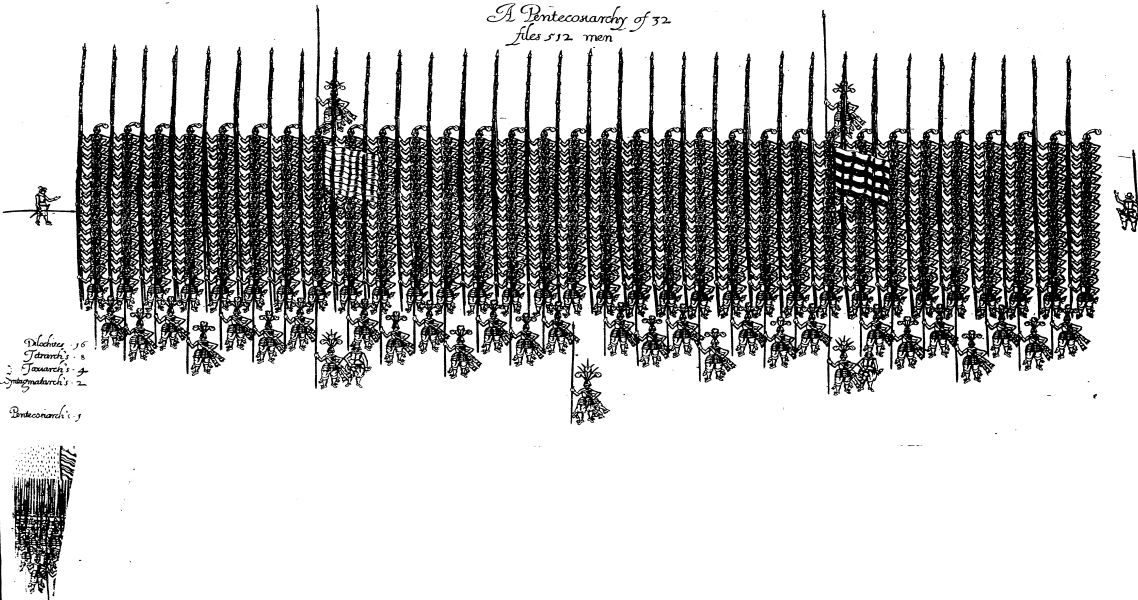
ordered into bodies, which have every one a proper name. For they call 1 a *Dilochie* of thirty two men, whose Leader is tearmed *Liloches* 2 a *Tetrarchie*, and the Leader thereof *Tetrarches* having charge Two *Tetrarchies* 3 a *Taxis* of 128. men, and 8. files, and the Leader thereof *Taxiarche*. Two *Taxes* goe to 4. a *Syntagma* of 160. men, and the Leader thereof is called *Syntagmatarche*. A *Syntagma* is divided of some a *Xenagys*, and the Commander *Xenagos*. In every are five 1 superordinary men, viz: 6 An *Ensigne*, 7 a *Reare competitor*, 8 a *Sergeant*, and a 10 *Crier*. This *Syntagma* seemeth to have some of 16. men in length, and 16. in depth. Two *Syntagmas* make a *Phalanx* of 320. men, and 32. files, the Leader whereof is named *Phalangarches*. Two *Phalangarchies* make 1 a *Chiliarchy* of 1024. men, and 64. files, the Leader is called *Chiliarches*. Two *Chiliarchies* are called 1 a *Stratarchy* of 128. files, whose Leader is named *Stratarches*. Of some this part and the Leader thereof is called *Stratarches*. Two *Stratarchies* make 1 a *Phalanx* of 160. men, and 32. files, the Commander whereof is called *Phalangarches*. They call it a *Stratarchy*, and the Commander *Stratagos*. Two *Phalangarchies* make 1 a *Stratarchy* of 1024. men, and 64. files. There are that tearme it, and it is one of the wings. Two *Diphalangarchies* make a *fourphalangarchy* of 1024. files, and 16384. men. So have you in the order of armed foote two wings, foure *Phalangarchies*, eight *Merarchies*, thirty two *Pentecostarchies*, sixteene *Syntagmatarches*, one hundred and two *Taxiarches*, two hundred fiftie six *Tetrarchies*, five hundred twelvehundred and twenty foure files.

Notes.

have bene shewed, the manner of arming, and leyning of Souldiers, filing, of files, ioyning of files, and ranking, the local forme, and arrange, the number of the armed, light armed, and horse-men requir- e. This Chapter contains, as it were, the matter, of which a *Phalanx* is made up of it. These bodies are many, and arise out of ioyning files by doubling still

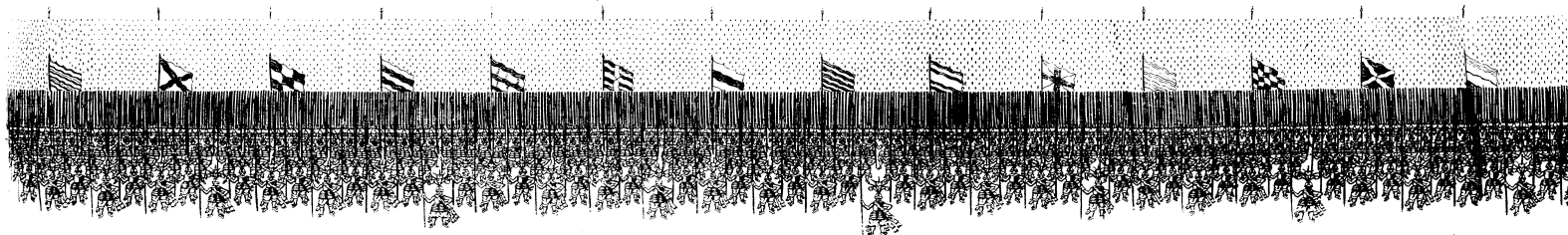
Cap. 9.

A Pentecostarchy of 32
files 512 men

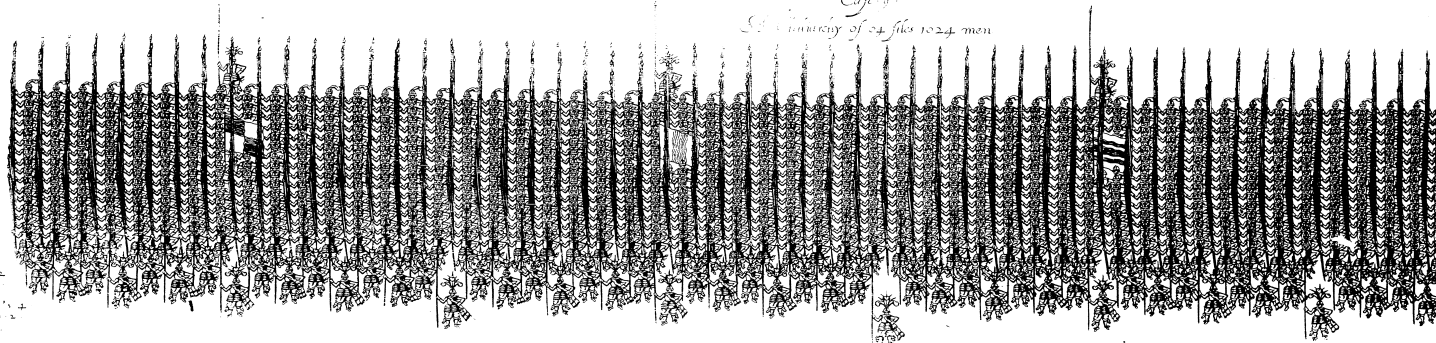


Cap: 9.

A Phalanx of 256 files 4096 men



Cap. 9.
 A Tetrarchy of 24 files 1024 men



Tetrarchy 1024
 Tetrarch 1024
 Tetrarch 1024
 Tetrarch 1024
 Tetrarch 1024
 Tetrarch 1024

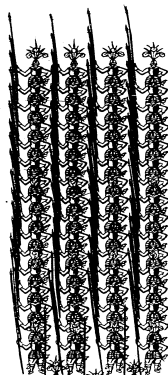
Only the difference is, that a Tetrarch being a King, or a Governor of
 both the government of the fourth part of the land, (for a Tetrarchy is the government of
 the fourth part) but a Tetrarchy in Italian signifies a body military consisting of four
 parts (4 files) and the Tetrarch commands not over one alone, but over all the 4 parts.
 3 A Taxis] As the word Tetrarchy is diversly taken, so is Taxis likewise. For
 sometimes it imports Order in a generall signification, as I noted before: Sometimes the
 order

h. Chlochy of
2 files 32 men



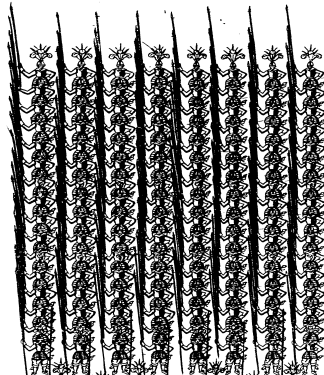
Adoute or h. Commander
of 2 files

h. Tetrarchy of
4 files 64 men



h. Tetrarch or Commander
of 4 files

h. Taxus of
8 files 128 men

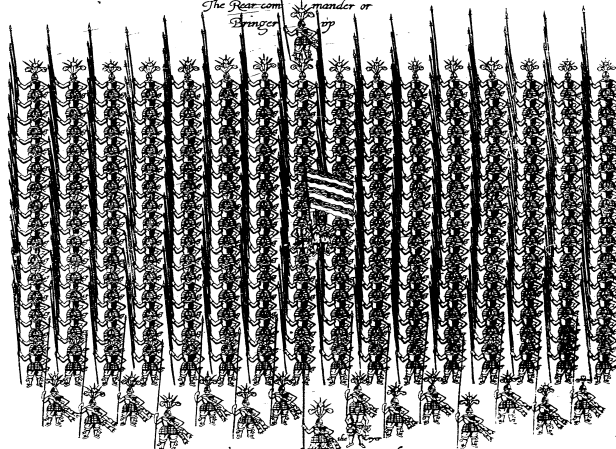


h. Taxarch or Commander
of 8 files

Cap. 9.
The Rear

h. Syntagma of
16 files 256 men

*The Rear com-
mander or
Bringer*



h. Syntagmarch or Commander
of 16 files



h. Sorcari

by knowne for Kings. Thessaly likewise was divided into 4. Principalities, Thessali-
otis, Pthiotis, Pelasgiotis, and Astiotis; whereof euery one was named a Tetrarchy.
Only the difference is, that a Tetrarch being a King, or a Gouverneur, signifies him, that
bath the government of the fourth part of the land, (for a Tetrarchy is the government of
the fourth part) But a Tetrarchy in Allian signifies a body military consisting of four
parts (4. files) and the Tetrarch commands not ouer one alone, but ouer all the 4. parts.
3. A Taxis.] As the word Tetrarchy is diuersly taken, so is Taxis likewise. For
sometimes it imports Order in a general signification, as I noted before: Sometimes the
F 3 order

still their number, and haue every one a seuerall Commander. The least is two files ioynd together, which is called a Dilochy; And because there are in Phalange 1024. files, there must also bee 512. Dilochies, which consist of two files a peece. If you double this body of two files, and make thereof a body of foure files, it hath an other name, and is called a Tetrarchy, of which Tetrarchies there are 256. in a Phalange. Double againe these 4. files, and make 8. the body is called Taxis. And these eight files, being doubled bring out the Syntagma of 16. files which is a square number of men, 16. in the front, and 16. in the flanke. And so proceeding still in 6. doublings more, you come at last to the fourefold Phalange containing the number of 16384. men, and 1024. files. Now as in the Phalange there are 16. bodies out of these doublings, the Dilochy being the first, and the fourefold Phalange the last: So doth *Ælian*, appoint for every body a Commander, who albeit they severally command, each his owne troupe, yet are they subordnately one vnder another, the lesser vnder the greater, till at last the souerainty of the command rest in the General of the Army. ^a The Dilochies are directed by the Tetrarches, the Tetrarches by the Taxiarches, the Taxiarches by the Syntagmatarches, the Syntagmatarches by the Pentecostarches, and they by the Chiliarches, ouer whom are Merarches, and ouer the Merarches the Phalangarches, and ouer them the Commanders of the wings, or Diphalangarches, and the soueraigne of the Armie or General is the highest, and last. The number of these Commanders a man would think were to no great purpose being in all (the 2. Diphalangarches therein comprized) 1022. besides the file Leaders, which standing in the heades of their files, amount but to two men more; that is to 1024. For so many (as I haue said) are the files of the Phalange. But if the conueniency be obserued, it will not seeme impertinent.

^b For all the Leaders being in front, (therefore are they called Leaders, because they precede, and the rest follow,) it makes both a gallant shew, and that rancke being as it were, the edge of our battaile, not only serues to be a vnder, and rent a peece the forces of our enemy; But also standeth as an assured bulwarke of defence before the rest of the Armie, that followeth. And it is well used by ^c Leo, that the multitude of Commanders (in orderly diuisions) both signifies, that there are many worthy and valliant men in the armie: And is a meanes to keep the Souldiers in greater obedience, and to giue vndoubted effect to all directions. Of what qualitie and disposition, those Leaders ought to be, you may see in the fourth Chapter of *Leos* Tactics. Only I will add, that as they are higher in dignity, so ought they in vertue and valour exceede those, that are vnder their command.

¹ A Dilochy] Consists of two files; for so signifies the word Dilochia: and the Lea-Dilochia, or is called a Dilochite.

² A Tetrarchy] Of foure files; and the Leader is called a Tetrarch, one that hath the command of foure files. And here I must once more admonish, that in the words of diuers signification, we must not weigh, what is the proper signification, but how they are used in this Art, and booke.

For the word Tetrarch signifieth sometimes a King: as *Hefychius* hath: and ^d *Deiotarus* in *Tully* is called a Tetrarch, and ^e *Herode* in the Gospell, who hath are common-
orator. pro
knowne for Kings. Thessaly likewise was diuided into 4. Principalities, The Thessali-
otis, Pthiotis, Pelagiotis, and Astiotis; whereof euery one was named a Tetrarchy.
Only the difference is, that a Tetrarch being a King, or a Gouvernour, signifies him, that
hath the government of the fourth part of the land, (for a Tetrarchy is the government of
the fourth part) But a Tetrarchy in *Ælian* signifies a body military consisting of foure
parts (4. files) and the Tetrarch commands not ouer one alone, but ouer all the 4. parts.

³ A Taxis] As the word Tetrarchy is diuersly taken, so is Taxis likewise. For
sometimes it imports Order in a generall signification, as I noted before: Sometimes the

¹ order of a battaile: sometimes a company of any kinde of Souldiers, foote, or horse. as Taxis Peltastrum, Taxis Equitum; Sometimes a single Phalange, as in ² *Antian* mention is made of Taxis Oeni, Taxis Perdicae, and Taxis Meleagri &c. who were Phalangarches, as the story sheweth. ³ Sometimes for all the armed, as Taxis Phalangitarum: Sometimes a ranke of men standing embattailed, as in Thucydides, who describing the battell of the Lacedemonians, saith the front (which he calleth the first ranke: ten proteen Taxis) consisted of 448. But in a more speciall signification it is taken for a band of Souldiers. And in that signification the number varieth. ⁴ In Xenophon, it comprehendeth a hundred men: What the number of the Athenian Taxis was, I finde not delivered by any Writer. That they had Taxisarches ⁵ Polyenus sheweth plainly. And if a man with leaue might gesse, I would imagine their Taxis consisted of 250 men: For I finde in the same place of Polyenus, that they had Chiliarchies, Pentecoliarchies, Taxies, and Lochagies. I have before shewed, that Lochos in Xenophon is made sometimes of about 100. men. Out of which may be inferred with probability, that Taxis, being the next degree above the Lochagie, hath the double number, or more; The rather because a Chiliarchie having in it a 1000. the Pentecoliarchie must haue 500. and by likelihood the Taxis 250. as being the next office under the Pentecoliarchie. But whatseuer the Taxis of the Athenians, or of other people was, *Eliau* maketh his Taxis up with 128 men, and 8 files; which is a double number to the Tetrarchie. With whom *Suidas* agreeth, giuing 2. Tetrarchies to a Taxis: and saith it consists of 128 men. The Commander of the Taxis is called a Taxisarch, as the Commander of the Tetrarchie is a Tetrarch. Here I am to note by the way, that the Interpreter of *Xenophon* translateth Taxisarcha, the Commander of a Cohort; where Taxis in the straighter signification cannot be taken for a Cohort: because a Cohort differeth much in number, having in it at the least 500. and odde men, where the Taxis, when it is greatest hath no more then 128. And ¹ Polybius saith plainly, that *Spira* is the Greeke word, that fully expresth the *Romane Cohort*.

¹ Polyb. lib. 11. c. 41. G.

² Polybius callitha Cohortem Syntagma, lib. 11. c. 41. G. in *Diod. Sicul.* lib. 13. p. 397.

³ Cyp. 31.

⁴ Suidas in *Meios.*

⁵ Suidas in *Xenagis* & *Iul. Poll. lib.* c. 10. ⁶ Polyb. lib. 1. c. 32. B.

number, whereof strangers made their companies, that serued amongst the *Grecians*. And I thinke, and shall till better information, that the body of the light armed called a *Xenagis* mentioned hereafter, had that name likewise for the same reason. Now of all the bodies in this Chapter mentioned, there is none that cometh so neere the companies as at this day, as doth the Syntagma, for (excepting that our numbers differre, and are in diuers places more, or lesse) the offices of each are alike. You haue in the Syntagma a Lieutenant, or Reare Commander; so in our Companies. In the Syntagma, is an Ensigne, and an Ensigne-bearer: the like in our Companies. In a Syntagma is one Sergeant, our part haue two drummes. The Syntagma had a trumpet, and our Companies for the most *Macedonians* had. What the use and place of all the Officers was, I will straightly direct.

¹ Five superordinarie men; Namely the Ensigne the Reare-commander, the Trumpetter, the Sergeant, and the Crier of whom we left spake. That which I translated, *superordinari*, is in Greeke *Ectactoi*. ² *Suidas* giues the reason, why they were so called: because saith he, they were not numbered as part of the battaile, that is ordered in files & rankes. ³ As *Xenophon* saith of *Mitarches*, *Chiliarches*, and *Taxisarches*, & other Commanders (whom *Cyrus* called to him) that they were not reckoned amongst the militarie numbers, and might depart from the Phalange without altering the forme thereof. In the files they could not be, because they should so increase the number in the files, and make one longer then an other, and binder doublings; and other motions, besides the deformity, they should bring in, in making the battaile uneven: And a file of themselves they could not make. The like disorder would they bring in the rankes, where they could not conveniently stand, vntlesse some body filed with them, being much shorter of a file of themselves. Besides their employment is so firre here and there apart, as they are commanded: where they of files, and rankes neuer moue single, but iointly, as shall seem good to their Commander. And albeit these five be removed from the battaile, yet remaineth the battaile without them entire of it selfe, and in perfect forme, as though there were no need of them, when notwithstanding their use is otherwise so needfull that although the battaile may be, it cannot well be without them.

An Ensigne. Our use is to call the Ensigne-bearer an Ensigne for breuitie sake; As a Drummer, a Trumpeter, a Trumpet, and that not absurdly. A distinction will easily appeare in common speech, by the application of words of circumstance to the one, or the other. The end why ensignes were diuised appeareth in: *Diodorus Siculus*, he giuing diuers reasons, why the Egyptians (whom he accounted the ancientest of men) were carried away with superstition of worshipping Beasts, after the manner of the Country, hath amongst other words these in effect: A second cause the Egyptians giue, because of old time being in diuers conflicts thorough disorder in their Armie, vanquished by their borderers, they had recourse to the inuention & bearing of Ensignes in their troupes. They say therefore, that preparing images of the beasts, they now worshipp, and fastening them to the ends of long staves, the Commanders caused them to be borne aloft by meanes whereof every man knew of what troupe he was. And seeing this good order auailed much to victorie, they conceiued, that the beasts were the cause of their safety. In recompence whereof they ordered, that none of these beasts should be killed, but be honoured with religious care and worship. Ensignes were then deuised for readines to direct souldiers in particular, whither to resort in time of fight. ⁴ *Cæsar* practiseth agreeth hereto: as *Cæsar* de bell. gall. lib. 2. by chance, and to what Ensigne soeuer, they they staid, least in seeking their

¹ *Diodorus Siculus*, lib. 1. c. 94.

² *Cæsar* de bell. gall. lib. 2.

owne

owne they might happily lose the time of fight. And Vegetius enlargeth the cause
 writing thus: The ancient warriors perceiving that in time of fight the order, and
 embattailing of an Armie was quickly brought in route, and confusion, to avoid
 this inconvenience, divided the Cohorts into Companies, and appointed an En-
 signe of every Company. So that in the Ensigne was written, of what Cohort
 and of what number in the Cohort the Companie was. Which the souldier fee-
 ing, or reading could not erray from their Companions, though the tumult
 were neuer so great. * Leo also maketh this use of the Ensigne: Vce command
 also, saith he, that the heads of the Ensignes of every Company or Band be of one
 colour, and that the filke of every Turme, or Drunge, haue a colour by it selfe.
 And to the end that every Companie may with ease know their owne Ensigne,
 other markes and tokens are to be added to the heads of the Ensignes, that accord-
 ing to Turmes, and Drunges, and Companies, they may be knowne. But in any
 case, let the Ensignes of every Turmarchy be different one from another, & cleare
 to be discerned, that the souldiers may know them euen at a farre distance. His
 meaning, as I take it, is, that every great body, or regiment should beare in their Ensignes
 a several colour, and that the Companies of that body should likewise hold themselves to
 the same colour in their Ensignes: So notwithstanding that (as the use is at this day)
 the Ensignes of every Company should haue a several marke to bee knowne by, besides
 the colour in generall. For so both the Regiment may be quickly discerned, and one Com-
 pany with facilitie be distinguished from another. What the forme of the Ensigne was,
 we may out of the former place of Diodorus see: The Egyptians, saith he, counterfeiting
 the shape of those Beasts, which they worshipped, fastened the Portraite
 to the end of long staffes. * Xenophon testifies the like of the Standard of Cyrus.
 Cyrus (saith he) commanded his army to cast their eyes vpon the Standard, and
 to follow it with equall pace, and in order. The Standard was a golden Eagle
 stretch out vpon the end of a long staffe. Which Standard is at this day the Stan-
 dard of the Kings of Persia. The Ensigne was nothing else, but the figure of some beast
 aduanced high vpon the end of a long staffe. As of an Eagle, of a Wolfe, of a Horke,
 and such like; and sometimes they added peeces of coloured silke fastned vnder these
 images to make a greater difference betwixt the Ensignes. Whether our Ensignes at this
 day, made of many ells of Taffaty, or the ancient Ensignes of the Græcians (I may also
 adde of the Romans, for they obserued the same forme) are the better for use, I will not
 now dispute. I may notwithstanding freely say, that the stronger reason weigheth for the
 Ancient. For besides the authoritie of such excellent wits, as they were, and so exquisite
 in their invention; the reason of the lightnes is to be preferred: Besides the winde bath
 no such force ouer them, and they neither hinder the Souldiers, that stand next by con-
 tending, nor by flapping in their faces, nor take away the sight of such things as are to
 be obserued and regarded in the field. For the matter whereof the Ensigne was made,
 see Iustus Lipsius in his Commentaries to Polybius. As for the armour of the En-
 signe-bearer (especially the Ensigne-bearer of the armed) I take it for I haue no an-
 thoritie therein; that he had the same defensive Armour, that the Souldier which fought
 vnder the Ensigne had (excepting the Target) both to assure himselfe from the flying
 weapons of the light armed, and from the pike and sword of the armed, in case the bat-
 tle were entered and pierced as farre, as the Ensigne. For it was no reason, he should
 carry a Target, left both his hands should be bound, the right with the Ensigne, the left
 with the Target; and so he haue no use of either against the enemy. And in the left
 hand I would giue him a pære, or iaculus, (not a pike, which cannot be wielded with one
 hand;) for his owne defence, and to offend the enemy. Which weapon, I haue read En-
 signes

* Xenoph. Cy-
 rop. lib. 7.
 172. D.

* Iustus Lip-
 sius. lib. 4.
 De. cap. 4.

signes of ancient time did beare. What the Ensignes place was, whether in front, or in
 the middle of the Battaille, I see it controuerted. * P. Arius absolutely affirmeth, that
 the Ensignes were placed in the middle of the front, and 8 files on the right, and
 8 on the left, to the end they might be seene, and followed by all. That Ensignes were
 first inuentioned to be a marke of severall bodies military in an Army, I haue before shewed.
 But it followeth not thereof, that they were placed in the front in time of fight. The reason
 of following is of lesse force; Inasmuch as the Souldier well knoweth whom to follow,
 though he had no Ensigne at all, the Commander at times with his motion giuing him di-
 rection, when to aduance forward, when to turne his face to the right, or left hand, when
 to countermarch, when to double, and when to vse all other motions military. And
 the Commanders were therefore called Leaders, because they went on before, and the
 Souldiers followed after. So that the Ensigne, in regard of following, neede not to be
 in the front. * Tet in exercising the troups, and in marches, I finde, that the Ensigne
 was in the front, together with the Capitaine, Crier, Trumpeter, and Guide. But
 I take the reason to be, because being in the middle, and having neither file, nor ranke with
 the rest, they might happily bring a confusion, and be a hindrance to the changes, and di-
 vers figures of the Battaille. When the time of fight was, the Ensigne retired to his place,
 that is to the middle. For so Leo interpreteth himselfe in his precept of closing files: h
 Leo cap. 7.
 which must be done, saith he, not only by File-leaders in front, Commanders of file, and s
 Bringers-up in the Reare, but in the middle also, where the Ensigne standeth. And
 I rather agree to Leo herein, because I see, it was the manner of the Romans also, to
 place their Ensignes in the middle of their Maniples. From whence came the appel-
 lation of Antesignani, Souldiers that stood before the Ensignes, and Postsignani, that
 stood behinde. Besides the Ensigne being in the front, the Ensigne-bearer may loose
 get a clap, who falling the Ensigne goeth to ground, and is in danger of loosing; which
 was the greatest disgrace among the Romans, that might befall. Lastly, * Elian him-
 selfe in plaine words placeth the Corner of horse farre from the front. For speaking of
 the ordinarie Horse-troupe, he saith it is to consist of 64 horse, the first ranke of 15
 horse, the 2 of 13, the 3 of 11, the 4 of 9; descending still, and diminishing 2 horse in
 every ranke, till you come to one. He addeth: he shall carry the Corner, that standeth
 in the second ranke next the ranke-Commander on the left hand: which ranke is
 the second ranke, himselfe declarerth, making the ranke of 15 the first, the 2 the 13;
 which is the 7th from the front, and next the reare but one. If the Corner haue no place
 in front, why should the Ensigne, considering both (as to one use, and the reasons of
 seeing, and following are equal to both? And albeit I Suidas place the Ensigne, the
 Crier, the Tromper, and Sergeant, before the Battaille, the Lieutenant in the reare,
 he is notwithstanding to be understood, of the times of marching, or of exercising, which I
 noted before. For what (should that Rable of unarmed (being 4, in every Syntagma, and
 chief of the Armie: who therefore haue the front, that they may make speedier way into
 the enemies battell?

7 A Reare-commander] Was the same that a Lieutenant is with vs. He com-
 manded the Souldiers in the Reare, no lesse then the Syntagma-march in the front, and
 had his place in the Reare. What the duty of a Reare-commander was, I haue shewed
 plainly. He was armed, as the rest of the armed of the Syntagma, scilicet it downe most
 Target, and with such other armes, as I haue described in my notes vpon the second
 Chapter.

a Suidas in
Eclitica.

8 A Trumpet.] *The invention of the Trumpet is attributed to Titthenus Hercules sonne. But the different use of these officers is worth the noting out of.* Suidas: The Crier, *saith he*, *serveth to deliver directions by voice, the Ensigne by signall, when noite taketh away the hearing of the voice: the Trumpet by sound, when thorough thickness of dust a signall cannot be discerned: The Sergeant to bring forth things, and dispatch such messages, as his Syntagmarch commands. So that these officers were held all necessary for a Company, the one supplying the defect of the other, and serving for use when the other failed. The Trumpet then was to be used according to Suidas, when neither the Crier, nor Ensigne could doe service. With the Trumpet was the signall given for the Campe to remove, for the Campe to lodge. By the Trumpet the Souldiers were taught their time to fight, their time to retreat. The Trumpet set and discharged the watch. From the Trumpet came the measure of the Marche, and the quickness, and slowness of Pace. In briefe, the Trumpet did all the offices that the Dromme doth with us at this day. Whether the Trumpet or Dromme, are of most use in the field, I may not now dispute. Onely I will say that the Græcians and Romans the most expert and iudicious Souldiers, that ever were, held themselves to the Trumpet, and neuer used the Dromme. The Dromme was first invented by Bacchus, who, as Polyenus reporteth, fighting against the Indians in stead of Trumpets, gave the signall of Battaille with Cymballs and Drommes. From him it came to the Indians, who used it altogether, as Curtius noteth in the battell betwixt King Alexander the Great, and Porus. The Dromme of Parthians is described by Plutarch in the life of Crassus; and by Appian. And Leo saith, the Saracens, who invaded Christendome, and infected the Turkes with their superstition, ordered their fights by the Dromme. From this Eastern Asiaticall people it was brought into Europe; and now the generall custome is amongst all European Nations, that the foote have Drommes in the field, the horse Trumpets. And yet for the Trumpet, I cannot say, that all the Græcians held themselves precisely unto it. Plutarch much commendeth the Lacedemonian manner of toyning with the enemy, and writeth it is in this sort: When the King hath offered the Goale (that was the Lacedemonian sacrifice, when they were to give battaille) hee straight commands all the Army to crowne their heads, and the Flutes to sound the measure of *Passor*: And himselfe withall beginneth the *Passus* (the long they used when they were to charge) and advanceth first against the enemy. So that it is a braue, and no lesse fearefull thing to behold them pacing according to the measure of the Flutes; neither dissolving their order, nor shewing any astonishment of minde, but mildly, and ioyfully approaching the danger of conflict, dividing out their Marche to the found of the instrument. For it is not likely, that men so demeaning themselves, can be transported with feare, or choler. Nay rather they must needs haue a feeded minde full of hope, and assurance, as if God were present on their side: thus Plutarch. Out of whose words it is cleare, that the Lacedemonians used no Trumpets in fight, but Flutes, and made them their instruments to dance, as it were, the measures of warre by. For they used an *esse*, and slow pace, framed to the cadence of the found; which may well be resembled to the solemn measure, in dancing. Athenæus reherfeth out of Herodotus, that the Lydians used the like. But he addeth, that the Cretans made choice of the Harpe for their instrument of warre; as though it had been peculiar to that nation. Paulanius testifieth the like of the Lacedemonians. Polybius goeth not so farre, but affirmeth onely that the Cretans, and Lacedemonians in stead of Trumpets brought in Flutes, and measures into the warre. And if it were so that the Lacedemonians used Harpes, it is like, they took them from the Cretans. For I finde*

b Polyen. lib. 1.
in the 30. c. 1.
c Curtius lib. 8.
372.
d Plutarch in
Crasso
App. in Par-
then. 143.
e Plutarch in
Lyfargo.

h For the mea-
sure for the
Polyen lib. 3.
cap. 10. § 2.
i Plutarch in
Lyfargo. 143.
j Appian in
Pars. 143.
k Plutarch in
Lyfargo. 143.
l Polyen lib. 1.
cap. 10. § 3.

k Plutarch lib.
1. 282. A.
l Polyen lib. 1.
in Prole. 5. 11.
m Athenæus
dipnosoph. lib.
10. 117. A.
n Plutarch in
Lycogen. 129.
o Polyb. lib. 4.
259. E.

in Plutarch, that Lycurgus brought many of his Lawes from Crete, and had great familiarity with Thales the Cretan, whom he also sent to Lacedemon, to make an enquire for the establishing of his lawes, that were then newly finished. Yet Diodorus Siculus reporteth, that the Lacedemonians used also Trumpets in their Battailles. He lib. 15. 475. writing of a fight that was betwixt the Thebans, and Lacedemonians under the leading of Agellus, useth these words in effect: There was a strong fight betwixt them a long time, and at first Agellus had the better; but afterward, when the Thebans issued out of the City at all hands, Agellus seeing the multitude, caused the Trumpet to sound a retreat. The signe of retreat here, was given by Trumpets, and a semeth the Lacedemonians had the use both of Trumpet, and Flute. Of the Flute in pacing toward the enemy to ize battaille; of the Trumpet in all other military signalls, such (I haue before noted it) as the rest of the Græcians gave by Trumpet. The place of the Trumpet in the time of the Battaille was within the Phalange by the Ensigne. Thucydides placeth the Flutes of the Lacedemonians within the battaille, where they can finde no room, unless they stand by the Ensignes. And albeir Polienus saith, the Flute led the Army, and went before, yet that it is to be understood in the marche. For in case of a Marche, or exercise, Leo also giueth the Trumpet place by the Capitaine in front. When the fight commeth, he retireth himselfe to his place in the Battaille with the rest.

p Polyen. lib. 1.
in Prole. 5. 11.
q Plutarch in
Lycogen. 129.
r Thucyd. lib.
2. 139.
s Polyen lib. 1.
in Prole. 5. 11.
t Plutarch in
Lycogen. 129.
u Leo cap. 4.
v Leo cap. 4.

9 A Sergeant.] *The word Hyperetes significeth a Miniſter, (which is all one with the French word Sergeant, as appeareth by the interpretation of our Law in selfe, wherein the Sergeants, next degree to Iustices, are called seruiantes ad legem. I reſpect therefore the name of Sergeant, because it is familiar amongst ſouldiers. And a Sergeant hath the same office in our Warre that Hyperetes had amongst the Græcians. What his duty and service should be, is declared out of Suidas. I here were in opinion, and worth of their places is expressed by the same Xenophon. The Sergeants in warre, saith he, worthy of no lesse honour, than messengers, matter of warre, understanding, quick, swift, industrious, and voide of feare; be sides endued with all qualities requisite in the best sort of men; & that they were to accustom themselves to refuse no manner of service, but willingly vndergo their Commanders in Marches, and other times, (save onely when Battaille was to be ioynd, and alwayes expected his command. During the fight, they retired to some place, where they might bee ready at call; for (as I said before) they could haue no place in front.*

x Suidas in
Eclitica.
y Xenophon.
Cyrop. lib. 7.
191. A.
z Xenoph.
Cyrop. lib. 2.
44. D.
a See Suidas in
the word Kereux.

10 A Crier.] *Concerning the office of a Crier, Suidas hath taught us, that he was to deliver the Commanders pleasure by voice. Leo calleth him Mandator, from the Latine word, because he signified to the souldiers, Mandata, the commandments of the Capitaine. In exercise he stood as the head of the Troupe, taking from the Commander the words of direction, and making, as it were, proclamation of them to the Souldiers; and served often, when neither Trumpet, nor signall might be giuen; he was otherwise also of great use. For in all busines which required distinct signification of any sudden alteration in the Army, the Crier had his part alone. Xenophon telleth in the Græcians returne out of Persia, that Clearchus their General led them not againſt the enemy, both because their courages began to fall, and also because they were all the day fasting, and it grew somewhat late. But yet hee turned not out of the way, left he might seeme to ſlie; but holding on right forward, he came with the vanguard*

x Xenoph. de
exped. Cyri
lib. 2. 277. B.

vanguard, to the next Villages by fenne-set there quartered; The very timber of the houſes of ſome of thoſe Villages was broken downe, and carried away by thoſe of the Kings armie. The firſt therefore lodged themſelves reaſonably, the laſt being be-nighted every man took vp his lodging as it fell out, and made a great noiſe, calling one after another, ſo that the enemy heard it. Whereby it came to paſſe, that the next of them fled out of their tents. This appeared the next day, for neither was there carriage-beaſt, nor Campe, nor ſmoake neere at hand to be ſcene. The King alſo was terrified as it ſhould ſeeme, with the acceſſe of the Armie. Which he declared by the next daies worke. Yet in the proceſſe of night a feare ſeized the Græcians themſelves: and the tumult, and huile-burly was ſuch, as is wont, when men are poſſeſſed with feare. Clearchus in this diſtreſſe commanded Thymides the Elian (whom hee then had with him, the beſt Crier of thoſe times) after ſilence, to make proclamation, that the Commanders ſignified generally, that whoſoever could bring forth the Author of this tumult ſhould have a * talent of ſilver for his paines. After this narration may appeare, that the Crier performed that, which neither Trumpet nor other ſignall could doe, the terror riſing in the night (which is the time of conſuſion and diſorder) and neither could the Trumpet give any certaine ſound to remedy the perill, nor any other ſignall be diſcerned by reaſon of the darkneſſe; and this ſervice was done by the Crier amongſt his owne ſolke. His ſervice againſt the enemy is declared in the ſaſt of * Cleocritus the Athenian Crier who after the fight, betwixt Thraſybulus and the 30. Tyrants (wherein Critias and Hippomachus were ſlaine) wiſh a proclamation to the Citizens, reconciled them to Thraſybulus, and was cauſe that the Tyrants were depoſed, and had their authority abrogated by the people. The like ſervice was done by a Crier in the behalfe of the Græcians againſt the Perſians, about the time of the battaile of Platææ. The ſtorie is this: c When the Græcians vnder the conduct of Leotychides, the Lacedæmonian, and Xanthippus the Athenian, had gathered a ſeete of 250. Gallies together to the end to deliuer the Ilanders, and the Cities of the Continent of Aſia the leſſe, out of the ſerutide of the Perſians, they failed out of Delos. The Perſians then remained at Samos. But hearing of the approach of the Græcians, they left Samos, and put over to Mycale a City of Ionia. And becauſe they perceived their ſhippes vnſit for fight, they drew them on land, and fortified the place, where they landed, with a wadden wall, and a deepe trench. Neuertheleſſe they ſent for ſoote forces, from Sardes, and other the next Cities, and aſſembled to the number of a 10000 men; And made prouiſion for all things neceſſarie for warre, therather, becauſe they ſuſpected the Ionians would reuolt. Leotychides hauing put his ſeete in order, failed towards the Barbarians, that were in Mycale, and diſpatched away before a ſhippe, wherein was a Crier, who had the ſhilleſt voice in all the Armie. Him he commanded to ſaile vp cloſe to the enemy, and to proclaime aloud, that the Græcians hauing overcome the Perſians at Platææ, were now come thither to deliuer and ſet free the Græcian Cities of Aſia. This was done by Leotychides to the end to diſſeuſe the Aſian Græcians from the Barbarians, and to raiſe a tumult in the enemies Campe. Which alſo came to paſſe. What ſervice could be of more importance, then to ſet a diſturbance betwixt the enemies? It was done by the voice of a Crier. More examples I could alledge, but theſe may ſuffice. The Criers place was alwaies to attend the Commander in the head of the Traupes, vnleſſe in the time of fight; at which time his voice could not be heard but gave place to the noiſe of Trumpets and clashing of armes.

II A

a About a 176 pounds ſiluer
ſut. Poli lib. 9.
cap. 6. 430. 437.

b Xenoph.
ſutor. Græc.
lib. 3. 474.

c Diodor. Sic.
lib. 11. 260.

11 A Tetragonall forme] That is of foure equall ſides, or foure ſquare; But we muſt underſtand (which Elian after teacheth) that there are two kinds of Tetragonall, or ſquare bodies military, one in number, the other in figure. In number, when the tagma hath 16. in front, and 16. in flankes. In figure, when the number of the front is greater, then the number of the flankes, and yet front and flankes ſtretch out an equall length of ground; as in the ſquares of horſe, whereof Elian ſpeaketh to be greater. This laſt ſquare is in this day called a ſquare of ground, becauſe the ſpace of ground, which containeth the length of the front, ſtretcheth out juſtly as far, as the ſpace of ground, which containeth the depth of the flankes. It is cauſed by the difference of diſtance, which is betwixt the Souldiers in front, and betwixt the Souldiers in flankes. In front, being cloſe fight, the diſtance betwixt Souldier, and Souldier, is but a cubite; that is a foote, and the diſtance betwixt ſouldier, and ſouldier, in flankes is two cubits, or ſixte, and which proportion will giue no more, then halfe ſo many men in flankes, as in front, and yet maintaineth the tracteſſe and euenneſſe of the ſides of the ſquare, as in front, and line, which meaſureth the front, and flankes, ſhall be all one.

Elian. cap. 18.

12 A Pentecolarchie] The word is a command of 500, and that was ſometimes the number. In the Macedonian Phalange, it comprehendeth a 12 men. The cauſe of difference is the difference betwixt the file of the Macedonians, and the file of the ancient Græcians (whereof I haue ſpoken before) the odd 12 men coming in by the fifth doubling of 16. And the number being ſo neere 500, though ſomewhat above, the name of Pentecolarchie is ſtill retained, becauſe it was then in uſe, and no other more ſit could be found.

13 A Chiliarchie] The command of 1000 men according to the name; Elian giueth it a 1024. from the doubling of 512. The Tribunes of the Roman Legions are by the Greeke Hiſtorians termed Chiliarchs; yet is there a great difference; for the Chiliarchs haue no more command, then ouer their Chiliarchie conſiſting of 1000 men, and ſometimes of more, as here in Elian of 1024. But every Tribune had in his turne the command of the whole Legion. And againe there being 12 Tribunes, to every Legion (which at firſt had in it 3000, afterward 4000, then 5000, and in the time of Vegetius 6000 men) he wth ſhould a Tribune be called a Chiliarch and be a Leader of a thouſand, as he could not have above 500 for his command, as ſaid in Polybius time, (the legion being but 4200) not above 200 and odd. But the Roman manner of warre and ordering of troups, differed much from the Græcians; and the Græcians in ſeeking a Tribune charge of a Tribune. Our Coronells, for their command, of a Regiment come neerer to the Græcian Chiliarchs; yet ours differ in that they haue Companies in their owne Regiments, which the Græcian Chiliarchs had not, and where * Q. Curtius ſaith, that the Chiliarchy was firſt inſtituted at Babylon by Alexander, as a reward for ſervice, it ſeemeth to be otherwiſe. For as ſiſide this in no other Author, ſo ſiſide 1, that Chiliarchs were long before Alexanders time. * Xenophon reporteth, that Cyrus ſo encouraged his ſouldiers to be valiant, promiſed to the Taxiarchs to make them Chiliarchs, to the Lochagi to make them Taxiarchs, to the Decarches to make them Lochagi, to the Pempadarches to make them Decarches; and that Cyrus made Chryſanthus a Chiliarch of horſe in regard of his worth, and forwardneſſe in ſervice. And afterward he calleth * Phranuchus, and Aſiadarch, Chiliarchs of horſe, and Artabatus and Arageras Chiliarchs of ſoote: * Polyenus wiſeſſeth that in Iphicars time the Athenians had Chiliarchs, and Pentecolarchs, ſo that the inſtitution is in Iphicarus

a Plutarch. in
Romulo.
b Saluſt. in Iu-
gurtius.
c Veget. lib. 2.
cap. 22.

d Quint. Curt.
lib. 3. 106.

e Xenoph. Cy.
lib. 1. 11. 1. 43.

f Xenoph. Cy.
lib. 2. 1. 1. 1. 1.

g Xenoph. Cy.
lib. 2. 1. 1. 1. 1.

h Polyen. lib. 3.
cap. 1. 1. 1.

The Tactics

So then *Ælian* hath in his *Phalange* of armed (besides the two *Diphalangarchi*) 1020. Officers.

<i>Dilochites</i>	512.
<i>Tetrarchs</i>	256.
<i>Taxiarchs</i>	128.
<i>Syntagmatarchs</i>	64.
<i>Penecostarchs</i>	32.
<i>Chiliarchs</i>	16.
<i>Merarchs</i>	8.
<i>Phalangarchis</i>	4.
	1020.

I have set downe the figures of all the bodies described by *Ælian* as farre, as the *Phalangarchy*. The rest would haue bene troublesome to insert as requiring more paper, then would stand with any reasonable proportion: neither are they greatly needfull. For two *Phalangarchies* rayned in an even front, and in a convenient distance, will secure one a *Diphallange*; foure in an even front with a like distance will make the foure fold *Phalange*. So that thereby the forme of it will appeare.

The precedence, and dignitie of place in the offices of the *Phalange*.

CHAR. X.

THe best of the *Phalange* Commanders is placed on the right wing, the second on the left wing, the third in valour in the right hand next the second *Phalange* toward the middle section. The fourth on the left hand next the first *Phalange* toward the middle section likewise. So the first and fourth *Phalange* haue Commanders of the first, and fourth worth: The second and third *Phalange* haue Commanders of the second and third worth. Now wee will shew by demonstration, that the first, and fourth worth, and valor, are equal to the second, and third; So that the Commanders in each wing are of valor alike.

The Leaders also of the severall *Merarchs* are thus disposed. The first hath his place in the head of the first *Phalange* on the left hand: The second on the right hand of the second *Phalange*: The third on the left hand of the third *Phalange*: The fourth on the right hand of the fourth *Phalange*. Also the Leaders of files in every *Tetrarchy* are so placed, that the Leader of the first file hath preeminence in valor and place; the Leader of the fourth file standeth next him: Then the Leader of the third file, and the Leader of the second file last. For then are *Dilochites* of equal valor when the first *Dilochie* hath the first, and fourth Leaders, the second *Dilochie* the second, and the third Leaders in valor and reputation. For it appeareth in the *Mathematicks*, that, when there are *Analogies*, or answerable proportions of foure magnitudes propounded, that, which ariseth of the first, and fourth, will counteruaile that, which ariseth of the second, and third magnitude. And because there are foure *Tetrarchies* in every *Syntagma*, wee may giue the Leaders of the *Tetrarchies* place according to the same proportion, as to place the *Tetrarch* of the first *Tetrarchy* on the right hand, giuing him the first place of worth on his left hand the *Tetrarch* of the fourth *Tetrarchy* in the fourth place of worth. Then again next him the *Tetrarch* of the third *Tetrarchy* in the third place of worth, and on his

left

of *Ælian*.

left hand the *Tetrarch* of the second *Tetrarchy* in the second place of worth. In like manner are the greater commands also to be proportioned.

Notes.

The former Chapter was of the Officers and of the bodies of the *Phalange*; this is of the place of every one, according to his worth. And first wee are to note, that all the ^a Commanders were placed in front of those, that they commanded; so that they might direct, and lead them at occasion should require. For ^b Xenophon saith of Cyrus army, the Decadarchs, or file Leaders, had care of the files, the *Lochagie* of the Decadarchs, the *Taxiarchs* of the *Lochagie*, the *Chiliarchs* of the *Taxiarchs*, the *Myriarchs* of the *Chiliarchs*: So in the *Phalange* of *Ælian* the file Leader had the command of his file, the *Dilochites* of the file Leaders, the *Tetrarchs* of the *Dilochites*, the *Taxiarchs* of the *Tetrarchs*, and so the rest, till you come to the General, who cared for all, directed all, and under whom all the Commanders were. The General hath bene placed sometimes in the right wing, sometimes in the middle of the *Phalange*. ^c Vegetius saith, that the General of the Armie is accustomed to be in the right wing betwixt the horse, and the foote. Hee addeth, this is the place, which governeth the whole battaile, from whence the salying out is most direct, and free. Therefore he standeth betwixt both, that hee might both govern horse, and foote with counsell, and with authority exhort them to fight. ^d Cyrus in his battaile against *Crestus* took his place in the right wing, betwixt the right hand point of the battaile, and of the horse, that were ranged in the wing; ^e Alexander the great in his battailes took the same place; ^f Timoleon in his fight against the Carthaginians placed himselfe in the middle of the battaile. ^g Diodorus Siculus saith, that, it is the manner of the Scythians, that the King should stand in the middle of the *Phalange*. The like doth ^h Ariar affirme of the Persians, and saith, that *Darius* had his place there. ⁱ Leo also giueth the middle of the battaile to the General. And there placeth the battaile over which he would haue him to command.

1 The best of the *Phalangarchis*] This ordering of the *Phalangarchis* the best on the right hand wing, the second on the left, the third next him in the left wing on his right hand toward the middle section: The fourth in the right wing on the left hand of the first toward the middle section thus, ² ³ ⁴ connecteth of a Geometrical proportion, which proportion giueth law to the ordering of the rest of the Commanders. The rule together that which ariseth of the first, and fourth, is equal to that, which ariseth of the second, and third. As 2. 8. 14. 20. each exceedeth the other, 6. The additi- on of 2. to 20. begetteth an equall number to 8, and 14. added together. So is it in all of proportion, that haue the same equalitie of a esse one above an other. Out of this rule do in the *Phalange*. For Leaders and Commanders are (or ought at least to bee) chosen by worth, and valour: and the preferments of the field haue bene held according to vertue. Say then the *Phalangarchis* are preferred to their places ac- cording to their worth, and that the first *Phalangarch* is most worthy, the second next, the third next, the fourth least deserving of the foure. If you should place them, as they are in the right wing, the second before the next *Phalangarchie* in the same wing, and the other two *Phalangarchis* to command the left wing, the disproportion would be great; the third and fourth not being able to match the worth of the first, and second.

G 3

But

The Tactics

But if you place the best Phalangarch before the first Phalangarchie on the right wing, the second before the second Phalangarchie of the left wing, the third Phalangarch next him before the third Phalangarchie on the left wing, toward the middle Section; the fourth before the fourth Phalangarchie of the right wing toward the same Section, the valours of the Commanders, will be equal in both wings. For as in the number 1. 2. 3. 4. one and 4. make 5, as many, as is made by joining 2 and 3 together, so the worth of the fourth Phalangarch joined to the worth of the first will arise as high in true valuation, as the worths of the second and third joined together. And where the Phalangarchie on the left corner of the left wing is called the second, and the next Phalangarchie standing in the same wing the third; it is to be understood that it is second in dignity, not in succession of number for the fourth Phalangarchie in dignity standeth in place and number next the first; and the second Phalangarchie hath the first place of the whole Phalange. Their places then are after this manner according to Ælian.

$$\begin{array}{ccccccc} 2 & & f & & 3 & & 4 \\ b & & c & & d & & e \\ & & & & & & a \end{array}$$

For the understanding whereof, you are to note, that

- signifieth the first Phalangarchie.
- the second Phalangarchie.
- the third Phalangarchie.
- the fourth Phalangarchie.
- the Section of the right wing.
- the Section of the left wing.
- the middle Section.
- the place of the first Phalangarch.
- the place of the second Phalangarch.
- the place of the third Phalangarch.
- the place of the fourth Phalangarch.

2 The Leaders of the Merarchies } As the Phalangarchs so are all the other Commanders of the severall bodies placed by square, and the same observation to be had, of the dignities of the place, that was in the Phalangarchs: and these 4 Merarchies (for Ælian speaketh of no more than 4) must stand thus.

$$\begin{array}{ccccccc} P & M & M & P & P & M & M \\ 2 & 2 & 3 & 3 & 4 & 4 & 1 \\ & & & & & & 1 \end{array}$$

P, standeth for Phalangarchs.
M, for Merarchs.

Robertellus confesseth he findeth these Merarchs so placed in a written booke, and it is the true placing. The figures, he setteth downe out of his owne wit (as he termeth it) carry with them no favour of Ælians proportion. Patricius likewise seemeth to have mistaken this proportion in the figures he hath set downe, of which not one is right. I will referre the Reader to their booke, admonishing him onely of the mistaking. But Ælian placeth here but 4 Merarchs; what order shall be for the other seven? I have alwaies thought Ælian defective in this place, neither could I hitherto finde any man, that hath brought light to cleare the doubt. Patricius that purposely discov'erseth of this place of Ælian

of Ælian.

Ælian, speaketh of bestowing 4 Merarchs onely, as though the rest were to be throwne away from the Phalange. Robertellus seeking to bestow all 8, bestoweth them indeed, but not according to Ælians proportion, which notwithstanding he would seeme to follow. His figure is this.

$$\begin{array}{ccccccc} P. M. M. & M. M. P. & P. M. M. & M. M. P. \\ 1. 8. 4 & 3. 6. 3 & 4. 5. 2 & 1. 7. 2 \\ \text{The right wing} & & & \text{The left wing:} \\ & & \text{The Middle.} & \end{array}$$

The proportion is this, as I said, and not Ælians. For Ælian placed the first Merarch in the right wing; he placeth him in the left; Ælian the second in the second Phalangarchie, he in the fourth; Ælian the third in the left wing, he in the right; Ælian, the fourth in the fourth Phalangarchie, he in the first. The rest are so jumbled together, as though any thing else had bene sought for, rather than proportion. I take not upon mee to over-rule any doubt; but if amongst the rest I enterpose mine opinion, I hope, I shall not incurre iust blame. Thus then: seeing Ælians meaning is by evenesse and worth of number of both wings to finde out the worth of the Commanders of both, if I so distribute them, that the number of the one side shall counterbalance the number of the other, I cannot much stray from Ælians meaning. The figure following will doe it.

$$\begin{array}{ccccccc} P. M. M. & M. M. P. & P. M. M. & M. M. P. \\ 1. 5. 1 & 4. 8. 4 & 3. 7. 3 & 2. 6. 2 \\ \text{The right wing} & & \text{The Middle.} & \text{The left wing.} \end{array}$$

In this figure I have observed precisely the place, that Ælian gave to the 4 Merarchs. The first standeth on the left hand of the first Phalangarch; the second on the right hand of the second Phalangarch; the third on the left hand of the third Phalangarch; the 4th on the right hand of the 4th Phalangarch. The rest I have added, and divided according to the placing of the first: So that the number that ariseth of the addition of both wings, is alike, and the proportion held. In all the rest of the bodies, where there is a Command over 4, the keeping of the proportion hath no difficulty. So every Phalangarch commandeth over 4 Chiliarchs; every Merarch over 4 Pentecostarchs; every Chiliarch over 4 Syntagmatarchs; every Pentecostarch over 4 Taxiarchs; every Syntagmatarch over 4 Tetrarchs; every Taxiarch over 4 Dilochies; every Tetrarch over 4 files; In all which the Commander, which hath the right, hath the first place, he that hath the point of the left hand, the second place; he that standeth on the right hand next to him, the third place; the left place is his, who standeth next to the Commander of the right point on the left hand. And for the place of the Phalangarchs, and of 4 of the Merarchs, and the file-leaders, and of the Tetrarchs, they are laid out by Ælian. The rest appear by these, and are to be squared by the same rule of proportion, as Ælian admonished.

The whole wing	The left	The right
1	3	7
5	7	13
1	3	7
4	3	6
8	6	14
4	2	6
23	23	

The Merarch alone	The left	The right
1	7	
1	3	7
4	3	6
8	6	14
18	18	

The

The distances to be observed betwene Souldier and Souldier in opening and shutting the Phalange.

CHAP. XI.

WE are now to speake of *distances* both in length, and depth betwixt Souldier, and Souldier, as they stand ordered in Battaile. The *distances* vary in three sorts. For first they are placed in thinner distance for some speciall causes. And a Souldier so placed taketh vp 4 cubits. But in *Denfation* or *closing* he taketh vp 2 cubits. ³ In *Conspication* or *shutting*, one cubit.

Denfation then, or *closing* is, when we draw wide distances close together, and by *side-men*, and *followers* (that is both in length and depth) gather vp the bodie of the *Phalange*: so notwithstanding that the souldier yet hath libertie to moue, and turne about.

Conspication, or *shutting* is when the *Phalange* by *side-men* gathereth it selfe yet closer together, then in *Denfation*; so that by reason of the nearnesse there is left no *Declination*, or turning of faces either to the right, or left hand.

The use of *Closing* is, when the *Generall* leadeth the *Phalange* against the enemy. Of *Shutting* when he would haue it stand fast (and as it were *locked up*, and *serred*) to receive the charge of the enemy.

Seeing then there are 1024 *File-leaders* in the front of the *Phalange*, it is plaine that in their ordinary array they take vp in length 4096 *Cubits* (that is ten furlongs, and ninetie six cubits) In *Closing* five furlongs, and forty eight cubits. In *Shutting* two furlongs, a halfe, and tower and twenty cubits.

Notes.

AFTER Souldiers are armed, and distributed into bodies military, the next care is to be had of their Mouing. For as a man, let him be neuer so well proportioned, and strong, if he pace disorderly, and either set too great strides, or reele here, and there, or so mince, and tread out his steps, as if his legs were bound together, groweth hereby deformed, and not onely loseth his comelinesse, but his actiuite withall, and possibility to performe anything by strength: So is it of an Armie, that hath either too great distances, or is thronged up, or pressed too close together. Too much thronging hindeth, as it were, the souldiers hands, and taketh away the use of his weapons, as on the other side falling one loose from another, and standing or mouing too farre asunder, maketh the Battaile weakke, and disjointed, and subiect to the enemies entry, and easie to be broken. The meane betwixt both was brought in by King Philip, King of Macedonia, who first constituted, and raised the Macedonian *Phalange*, and invented the distances of opening and closing the same; imitating the setting of Targets (called *Synaspismos*) practised by the old Heroes at Troy. One of his discipline sprun: the distances mentioned here by Elian: which are of three sorts: The first are large distances of

Four Cubits: Which amount to six foute. For a Cubit containeth a foot and a halfe. This distance was used in marching, or else in solemne pompes and shewes. And the souldier hauing a pike of 14 Cubits or 21 long, whereof one halfe lay forward on his shoulder, and the other halfe backward, it was requisite he should haue a reasonable large distance, both in file and ranke, to the end, that in turning this way, or that way,

Shutting
shoulder

followed the waies with King's company, and gained many a battaile, whereby this occasion tolled out to succour; and as they excelled the yonger sort in greatnes of spirit, and military experience, so meeting with the run-a-waies, they bitterly teiuled, and taunted them for their cowardice; Then setting themselves close, and ioyning their Targets together, they repressed, and held the enemy short, who now seemed to haue the victory in his hands. Finally killing Ephialtes, and many other, they droue the rest into the City. A memorable service of the use of Targets, and of the *Synaspisme* of the Macedonians, which was not used, but when they either came upon, or received the charge of the enemy. And the Targets so knit together serued for a wall (as it were) to the whole *Phalange*, and by them the souldier

ph.
ib. 7.

led by
sides,
Thur.
5 192.

in in
10. 144.
D.C.
Sicul.
175.

a Caesar Cabel,
gall. lib. 2.
b Plutarch in
Philip. li. 10.

c Diodor. Sic.
lib. 16. 117.

d Polybius lib. 2.
c. 4. C.
100. cap. 17.
g. 61.
e Polybius lib. 7.
c. 4. A.
f Lxx. cap. 7.
g. 14.

* Synaspismos

was

The distances to be observed between Souldier and Souldier in opening and shutting the Phalange.

CHAP. XI.

WE are now to speake of *distances* both in length, and depth betwixt Souldier, and Souldier, as they stand ordered in Battaille. The *distances* vary three sorts. For first they are placed in thinner distance for some speciall causes, and a Souldier so placed taketh vp 4 cubits. But in 2 Denfation or closing he taketh vp 2 cubits. 3 In *Confipation* or *shutting*, one cubit.

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4 *Shutting* which he would haue it stand fast (and as it were locked up, and serred) receiue the charge of the enemy.

Seeing then there are 1024 *file-leaders* in the front of the *Phalange*, it is plain that 4 in their ordinary array they take vp in length 4096 Cubits 5 (that is ten furlongs, and nineteie fix cubits) In *Closing* five furlongs, and forty eight cubits. In *Shutting* two furlongs, a halfe, and lower and twenty cubits.

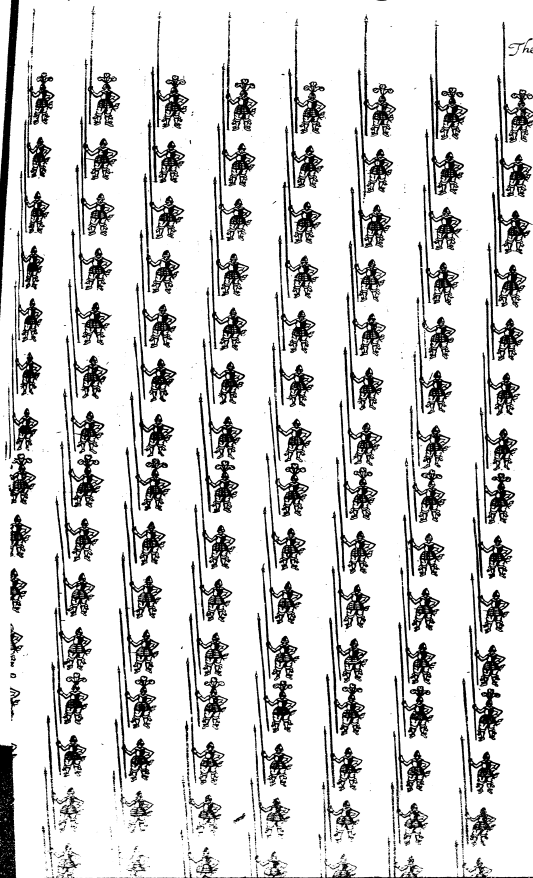
Notes.

After Souldiers are armed, and distributed into bodies military, the next care is to be had of their Mouing. For as a man, let him be neuer so well proportioned, and strong, if he pace disorderly, and either set too great strides, or reele here, and there, or so close, and tread out his steps, as if his legs were bound together, groweth hereby discomfort, and not onely loseth his comelinesse, but his activitie withall, and possibility to performe a vap, or resist two close together. 2 Too much threwing bindeth, as it were, loose from another, and standing or mouing too farre asunder, maketh the Battaille set, both was brought in by King Philip, King of Macedonia, who first constituted, and named the Macedonian Phalange, and invented the distances of opening and closing, as was at Troy. One of his discipline (sprung the distances mentioned here by Elian: are of three sorts) The first are large distances of foure cubits which amount to six fute. For a Cubit containeth a foute halfe. This 4 distance was used in marching, or else in solemn pompes and shewes, the souldier having a pike of 6 13 Cubits or 21 long. whereof one halfe lay forward on his souldier, and the other halfe backward, it was requisite he should have a reasonable large distance, both in file and ranke, 1 to the end, that in turning this way, or that way,

The first distance ordinary of face in file armuch in ranck

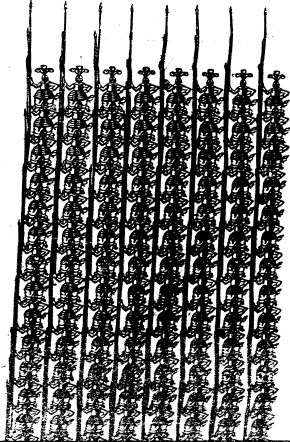
Fig. 11.

The Rearr



The second distance called *Shutting* or *sering* 2 face in file armuch in ranck

The third distance called *Shutting* or *sering* 3 face in file armuch in ranck



The distances to be observed betwene Souldier and Souldier in opening and shutting the Phalange.

CHAP. XI.

WE are now to speake of *distances* both in length, and depth betwixt Souldier, and Souldier, as they stand ordered in Battaille. The *distances* vary in three sorts. For first they are placed in thinner distance for some speciall causes. And a Souldier so placed taketh vp ¹ 4 cubits. But in ² *Densation* or *closing* he taketh vp 2 cubits. ³ In *Constipation* or *shutting*, one cubit.

Densation then, or *closing* is, when we draw wide distances close together, and by *side-men*, and *followers* (that is both in *length* and *depth*) gather vp the bodie of the *Phalange*: so notwithstanding that the souldier yet hath libertie to moue, and turne about.

Constipation, or *shutting* is when the *Phalange* by *side-men* gathereth it selfe yet closer together, then in *Densation*: so that by reason of the nearnesse there is left no *Declination*, or turning of faces either to the right, or left hand.

The vse of *Closing* is, when the *Generall* leadeth the *Phalange* against the enemy. Of *shutting* when he would haue it stand fast (and as it were *locked up*, and *serred*) to receiue the charge of the enemy.

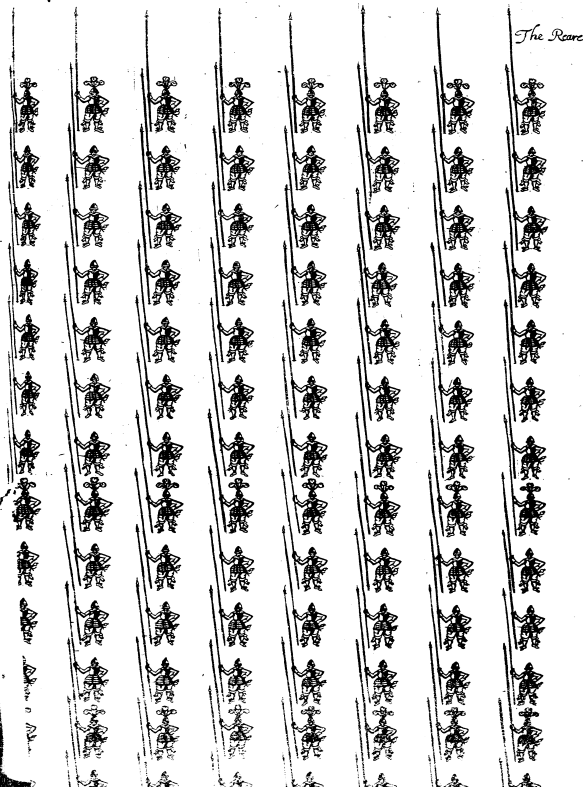
Seeing then there are 1024 *File-leaders* in the front of the *Phalange*, it is plaine that ⁴ in their ordinary array they take vp in length 4096 *Cubits* ⁵ (that is ten furlongs, and ninetie six cubits) In *Closing* five furlongs, and forty eight cubits. In *Shutting* two furlongs, a halfe, and tower and twenty cubits.

Notes.

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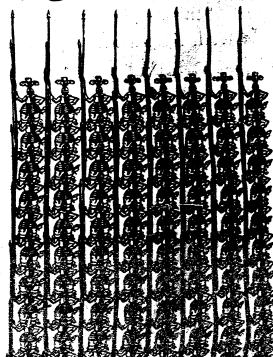
⁹ *Archare* of three sorts. The first are large distances of ¹⁰ Fourte Cubits. Which amount to six foute. For a Cubit containeth a foute, and a halfe. This ¹¹ distance was used in marching, or else in solemn pompes, and shewes. And the souldier having a pike of ¹² 14 Cubits or 21 long, whereof one halfe lay forward on his shoulder, and the other halfe backward, it was requisite he should have a reasonable large distance, both in file and ranke, ¹³ to the end, that in turning this way, or that

The first distance ordinary of fote in file armish in ranke



The Ranke

The second distance called closing & fote in file armish in ranke



a Ceste de but
gall. l. 1. 1. 1.
b Plurim in
Phalange

c Dider S.
lib. 16. 1. 1.
d Polyb. lib. 1.
e C. 1.
f Polyb. lib. 17.
g C. 1.
h Polyb. lib. 17.
i C. 1.
j Leo. cap. 7.
k 14.

a Caesar de b
gall. lib. 5.
b Plutarch.
Philopomen

c Diodor. Sic.
lib. 16. 510.
d Polyb. lib. 13.
264. C.
Leo cap. 17.
6. 61.
e Pol. lib. 17.
784. A.
f Leo cap. 7.
§. 54.

and raised the Macedonian Phalange, and invented the distances of opening and closing the same; imitating the ^a ferring of Targets (called Synaspismos) practised by the old Heroes at Troy. Out of his discipline sprung the distances mentioned here by Ælian: which are of three sorts. The first are large distances of

1 Four Cubits) which amount to five foute. For a Cubit containeth a foute and a halfe. This ^a distance was used in marching, or else in solemn pompes and shewes. And the souldier having a pike of ^a 14 Cubits or 21 long, whereas one halfe lay forward on his shoulder, and the other halfe backward, it was requisite he should have a reasonable large distance, both in file and ranke, to the end, that in turning this way, or that

way,

way, or that way, or moving out of his place (for no man in his marche, can alwaies hold his ranke) he offended not his next neighbours therewith. This distance our exercise at this day calleth open order. The next distance is of

Two Cubits] Or three foute. The name of it in Greeke is Pycnōsis, that is thickning. In Leo it is called Sphinxis, (knitting together) in our moderne exercise Order. And it is, when from the distance of 6 foute, we draw our Phalange both by file, and ranke, so close, that the souldiers stand but 3 foute one from another every way. This distance is used, when the Army approacheth neare to the enemy (and onely commeth not to charge) that it may be ready to shut, and locke it selfe for the charge, which is performed in the last distance of

One Cubit] A foute and a halfe. This is called Synaspismos, ioyning Target to Target. For, as I before shewed, the pikemen of the Macedonians used also Targets with their pikes, and in charging the enemy closed so neare in front, that their owne Targets touched one another. This kind of fight the Egyptians used in Xenophon (which he calleth locking together of Targets) and by means thereof had the advantage against the Persians. The Partian horse likewise comming to charge Crassus with their flames: After they perceived the depth of the locking of Targets, and the settlednesse, and stedfastnes of the Roman Phalange, they retired, and durst not come to hands with them. And Diodorus Siculus writes that Alexander besieging the City of Halicarnassus, there was in the City, and in service of Darius one Ephialtes an Athenian, son of great valour, and strength of body; He by the permission of Memnon

Generall of Darius Armie, determined to make a sally. And taking to him 2000 mercenarie souldiers, all chosen men, and giuing brands flaming with fire to one halfe, and reserving the rest for fight, he opened the gates, and fell out, throwing fire vpon the engines of battery, which soone caught a mighty flame; And marshaling the rest into a thicke and deepe Phalange, himselfe led on, and was the first that fell on the Macedonians coming to aide, and to quench the fire. Alexander aduertised hereof speeded to the medley; & ordered first the Macedonians in front, after them other choice men, for seconds; and in the third place men of extraordinarie account for their prowesse, himselfe leading them on sustained the enemy, which seemed vnresistible, and sent others to flake, and put out the fire, and to preferue the Engines. The fight was hot, and albeit the Macedonians found meanes to quench the fire, yet had Ephialtes the better in the fight; who both himselfe killed many with his owne hands, and the towers from the walls furnished with many Catapults annoyed greuously the Macedonians. In so much that some falling in the place, other some forsaking their ground by reason of the number of Engine Darts that fell thicke amongst them, Alexander himselfe was reduced to extremitie. Here the old souldiers of the Macedonians; although otherwise freed from such seruice in regard of their age, hauing of a long time followed the warres with King Philip, and gained many a battaile, were by this occasion tolled out to succour; and as they excelled the younger sort in greatness of spirit, and military experience, so meeting with the run-a-waies, they bitterly reuiled, and taunted them for their cowardice; Then ^a ferring themselves close, and ioyning their Targets together, they repelled, and held the enemy short, and who none seemed to haue the victory in his hands. Finally killing Ephialtes, and many other, they drove the rest into the City. A memorable seruice of the use of Targets, and of the Synaspismos of the Macedonians, which was not used, but when they either gave upon, or received the charge of the enemy. And the Targets so knit together served for a wall (as it were) to the whole Phalange, and by them the souldier

Xenoph.
Cyrop. lib. 7.
178. A.
It is called by
Thucydides,
Synaspis, Thucyd.
lib. 4. 393.
b Appian, in
Partian. 144.
A. 164. D.C.
Diod. Sicul.
lib. 17. 575.

* Synaspismos

was

was defended from the misuse weapon of the enemy, and his body covered even from the piercing of the sword. Synapismos then, or flunting, is that assistance in the Phalange, which bringseth the soldiers *Targe* to touch one another, and is limited by *Elia* to a cubit (that is a foot and a half), betwixt side-men, and side-men in the front. What distance the followers should have, *Elia* setteth not to be done in plaine words, but implies, that they should hold their 3 foot still, in that he saith the Phalange in composition gathereth the side-men closer, then in desension, but speaketh nothing of fallen ers. * Polybius teacheth it more plainly; who gaues them three foot distance from the Leader, both according to the Macedonian and Roman discipline, and that for the use of their armes: with whom *Elia* also agreeth * afterward. In what manner the Targeters made their closings, and how their Targets were cast from the backe, where they hung, to the left shoulder, I have before noted in the second Chapter, and therefore thinke it needlesse here to repeat. Now for the ground, that a Phalange taketh up in each of these orders, *Elia* sheweth it in the words following, allowing the Phalange.

4 In * ordinary array foure thousand cubits] *The Phalange in open order*, saith *Elia*, takes up 4096 cubits of ground. This is to be understood in front, or length; for in depth it hath no more, then 64 cubits; every souldier (which are in number, 10 in file) possessing 4 cubits of ground in his open order; 4 cubits is the part of the arme, which reacheth from the elbow to the middle fingers end, and is as much, as a foote and a halfe. In from then, there being 1024 File-leaders, we must alott to each of them four cubits of ground; to the thousand 4000 cubits, and to the odd twenty foure 96 cubits. For foure times twenty foure makes 96, which together comes to 4096 cubits, and to six thousand one hundred fortie foure foote.

5 Ten furlongs and ninty six cubits] Where this space is squared out by tenne furlongs, we must understand, that a furlong contains 4 foure hundred cubits, and 4096 being divided by 400 the quotient is 10: — that is ten furlongs and 96 cubits, as *Elia* saith. Which measure of ground the Phalange of armed taketh in open order. Of these furlongs * seven and a halfe go to a mile, by which accounts the front of the Phalange of armed in open order taketh up one mile, a quarter, and 346 cubits, measuring it by fette it amounts to 6130. In closing (which is named order, and is the next distance) because the souldier is allowed but 2 cubits, that is halfe so much, as in open order, the dimension will not exceede five furlongs; 48 cubits; that is 2048 cubits in all, which amounts to halfe a mile, halfe a quarter, and 173 cubits, in fette, 3072. In flunting 2 furlongs and a halfe, and 24 cubits; that is a quarter of a mile and 274 cubits.

The arming of the Phalange.

CHAP. XII.

THe Phalange is to be armed with Target and Pyke. The best Target is the Macedonian target made of brasse, and somewhat hollow, and having 3 eight handfulls in Diameter. The Pyke ought to be no shorter then 8 cubits; and the longest no longer, then a man may well vie and wield in handling.

Notes.

IN the second Chapter of this booke we handled the diversitie of armes, used in the Phalange. This setteth forth the choice, that is to be made for matter and fashion, and what

what sise is best of pike and target. For the other armor of the armed (whereof I spake, in my notes to the second Chapter) is (no question) to be fitted to the body of him, that shall wear them. He giueth then to the armed a target, and a pike, the target the Macedonian target, the matter whereof was first of brasse. I have shewed, that the Macedonian target was of brasse, and that they were called by reason of the bearing such targets Chalcipides Brasse-targets. I am induced to thinke, that, as Philip borrowed many other things in warre from the Lacedemonians, so he borrowed this kinde of target from them. For they by the ordinance of Lycurgus, were inuoyed to haue no other matter in their target, then brasse. * Xenophon giues a reason why they were made of brasse. For Lycurgus was of opinion, saith he, that such a Target was most fit for warre, because it is soone brought to shine, and it gathereth not rust easily, two great commodities in armes. For a beist the chiefest considerations be surenesse, and strength, yet is not the beauty to be neglected, which shining doth principally set out. * Besides that it dazzleth the eye of the enemy, and strikes an amazement into his minde. * Xenophon much admireth Agesilaus, that he so armed, and clothed his armie, that they seemed to be nothing, but brasse, and nothing, but scallor. The brasse he speaketh of, were the brasse targets of his souldiers, which covered the most part of the body, and were chiefly the object of the eye, without that, that any other weapon was at this time of brasse. Therefore, as I said, I am of opinion that the brasse Target came from the Spartans to the Macedonians. The Brasse-targets *Elia* would haue

2 Somewhat hollow] If they should beare straight out without any bowing, besides that they were vneaste, they would lie kicking out from the body, and not cover it much. The arme, or shoulder, that is inserted into the Target, is bowing. And the target somewhat bowing fits it for ease, and slopeth more toward the body to cover it, and is more pliable to be carried. But the hollownesse ought not to be much. It would haue it also

3 Eight handfulls in Diameter] The Diameter in a circle is a right line, which is drawne from one side of the circumference to the other passing through the Center, or middle point of the circle, dividing the circle in two equal parts. Here the Diameter of the target is taken for the exact breadth of the target, which ought to be, according to the Macedonian manner, eight handfulls, or two foote, that is 32 fingers. For foure handfulls go to a foote, and foure fingers to a handfull. * Leo giues it three Spithames, that is 26 fingers, if he meane the great * Spithame, which is of modic fingers. And the lesse compendending a handfull he cannot meane. For if should the breadth of the target be no more, but three handfulls, a breadth insufficient to cover any mans body. Whether of them is the better will appeare in triall. The Diameter that serues to cover the bodie, from the upper part of the necke to the middle part of the thigh, is enough in these round targets. That, which is more, is rather troublesome, then fit for use. And I am of Iphicrates indgement in targets, that performing the covering of the bodie, they should be as light, as may bee, least the shoulder be over-laden with vnnecesary weight. Which regard I prefferre the Target of *Elia*, before that of Leo; *Elia* reaching up to the height of the necke from the middle of the thigh; Leo carrying a handfull more in breadth, which in the circumference groweth to a good proportion of weight and greatnesse.

4 No shorter than 8 Cubits] That is 12 foote. Short pikes against long haue a great disadvantage. With the long pike a man is able to strike, and kill his enemy, before himselfe can be touched, or come in danger of a shorter, the pike keeping the enemy out so farre, as the length is. The experience of the battaile of * Sorano sheweth it, where Vitellozzo Vitelli discomfited the Almains only with the advantage of pikes an arme longer than theirs. Against long pikes, this policie was used by Cleonymus the Lacedemonian King, as * Plutarch tells. Cleonymus besieging Aedessa, and hauing thrown

a Polyb. lib. 17. 764. A.

b *Elia* c. 14.

c See Polyb. lib. 12. 664. C. 100 ca. 17. 591.

d Suidas in Pictura.

e Suidas in lib. 8. Leo cap. 17. 589.

a Xenophon de rep. Laced. 886. A.

b Plutarch in Cra. c. Xenoph. in Agesila. 659. B.

d Leo cap. 8. § 28. e Iul. Pollux lib. 3. cap. 4. § 2. callist. in 8 pame.

f Patricius Pa. rel. part. secum. lib. 3. cap. 8. g Polien. lib. 2 in Cleonym. 82.

throwne the wall of the City, the pikemen of the City sallied out, whose pikes were each 16 cubits in length. Cleonymus closed his Phalange in depth, and commanded the file-leaders to lay away their pikes; and when the pikemen of the enemy came to charge, to seize upon their pikes with both hands, and hold them fast, and the followers to passe thorough by the file-leaders sides, and maintaine the light. The file-leaders laid hold on the pikes, and the enemy strove to recover them out of their hands. In the meane time, the followers passing thorough the ranke of file leaders to the front, slew the enemies pikemen, and got the victory. *This was Cleonymus device against long pikes, which notwithstanding derogates nothing from the length of pikes more, than from shortnes. For the same policie might have prevailed as well against short pikes, as long, each as soone as the enemies have seized upon them, growing to be of no use. But that the longer pike is to be preferred before the shorter, I have showed before by reason: and the reformation of armes made by Iphicrates amongst the Athenians, and by Philopomen amongst the Achaians, will be warrant enough so to hold. In the length notwithstanding ought to be a reasonable consideration, that it exceede not the measure of his strength, that shall beare the pike.*

The worth that the File-leaders, and next followers should be of

CHAP. XIII.

THE File-leaders (as the Commanders of files of the Phalange) are to be the choice and flower of the Army, and to excell the rest as well in stature, as in experience and martiall skill. For this Ranke knitteth and bindeth in the Phalange, and of all other yeeldeth greatest use. For, as a sword taking to the edge as a weight, and sway, the swelling yron towards the backe exhibiteth thereby more violence in piercing, so in a Phalange the Ranke of File-leaders is the edge it selfe, and the multitude of after-commers is the swelling, and sway, and increase of weight.

Consideration must be had likewise of those that follow in the second Ranke. For their Pikes reach ioyntly over the front, and being next in place they are alwaies ready for use. And the File-leader falling, or being wounded, the next follower stepping to the front in his place, holdeth together, and preferueth the tenor of that Ranke vnbroken.

Furthermore, we are to order the third and the rest of the Ranks according to reason, and as the valour of our souldiers shall require.

This Chapter sheweth how the Souldiers are to be ordered in every File: whereof, because I have before spoken sufficiently in my Notes to the fifth Chapter, and the words of this Chapter carry no difficultie, or obscuritie with them, I will forbear to treat any further.

CHAP. XIII.

Of the strength of the Macedonian Phalange, and length of the Souldiers Pikes.

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THE Macedonian Phalange hath of enemies beene thought vnresistible, by reason of the manner of embattailing. For the Souldier with his Armes standeth in close order, or shutting, when he is ready for fight, occupying two Cubits of ground. And the length of his Pike is sixteene Cubits according to the first institution, but in truth it ought to be foureteeene Cubits; whereof the space betwixt the hands in charging taketh vp two Cubits, the other twelue lye out from the front of the Battaile. Those in the second Ranke, that stand next to the Leaders (loosing foure Cubits in the Phalange) have their Pikes reaching over the first Ranke ten Cubits. Those of the third Ranke eight Cubits, of the fourth Ranke six cubits, of the fifth 4 cubits, of the sixth 2 Cubits. The Pikes of the other behind cannot attaine to the first Ranke. And seeing five or six pikes are charged over the first Ranke, they present a fearefull sight to the enemy, and double the

Cap. 14

Pikes reaching over the Front



consequence, to make some principall Commanders not onely in front, but also in the Rear of the Battaile, for the causes before mentioned.

Notes.

THE strength of the Macedonian Phalange, which consisted principally in the protection, and charging of pikes, and knitting together of Targets, is here set downe. The whole Chapter seemeth to have beene taken out of Polybius, who handleth the same argument, and almost with the same words, but that Ælian, about the number of Cubits, which the Pikes take up reaching over the front of the Phalange.

The Macedonian Phalange, hath beene thought to be vnresistible. The strength of the Macedonian Phalange appeareth no way better, than by the conquests it hath made. King Philip was the inventor of it; and by that invention raised the kingdom of Macedonia from the poorest, to the powerfullest, and greatest kingdom of Europe; and (that I may use the words of Diodorus Siculus) finding the Crowne, at his comming to it, in bondage to the Myrians made it afterward Lady of many great Nations, and Cities; and purchased to himselfe, to be declared Generall of Greece.

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Diod. Sicul. lib. 16. 150.

Appian. in Syriacis. 97. E. Polyb. lib. 17. 763. E.

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The Superordinary Lieutenant of euery Syntagma must be a man of vnderstanding, overseeing the souldiers of his command, that they file, and ranke; and if for feare, or other occasion, any forsake their ground, he is to compell them againe to their places; and in Closing to put them (when neede requireth) as neare vp together, as they should stand. For it is a great strength, and assurance to the Phalange, to haue some principall Commander not onely in front, but also in the Rear of the Battaile, for the causes before mentioned.

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Appian, in Synais 97. E. Polyb. lib. 17. 763. E.

Diod. Sicul. lib. 16. § 10.

Greece. And first overthrowing the *Byzantines, Paionians, Thracians, and Scythians*, afterward set upon the kingdom of *Perseus* to brake it, after he had enfranchised the *Maronian Cities of Asia*. And albeit death intercepted him, yet he left his forces to his sonne *Alexander*, that he needed no other *allies* to overthrow the *Sauvage* reignery of *Perseus*. After his death ¹ Alexander took his kingdom, and *Antigon*, and *Antiochus* encountering, and vanquishing *Darius* in two great battles, ranne thorough *Asia* like a flood of fire; rearing a piece of land, that resisted, or stood in his way, and laid the foundation of this kingdom, which (albeit afterward divided) continued long in his successors. Neither was the experience of their invincibleness against the barbarous people only, but as much as, in the *Grecians*, who till *Philip's* time were esteemed the civile masters of *Armes* in *Europe*. This is cleare by the victories, the *Macedonians* obtained against the renowned *Cities of Greece*, both jointly and severally. ² Philip overthrow the *Phocians*, albeit the *Lacedemonians*, and *Athenians* joined with them. The same ³ Philip at *Cheronæa* defeated the power of the *Thebans*, and *Athenians* joined with them. ⁴ Alexander took and sacked the *Citie of Thebes*, that about that time was accounted the mightiest *Citie of Greece*. ⁵ His Lieutenant *Antipater* foyled the *Lacedemonians* in a great battle, and chafed out of *Greece* *Cleomenes* the last brave King of *Sparta*. Surely they were not beaten in the field by any Nation, but only by the *Romans*, and yet the judgement of ⁶ Polybius, doth in this also prove it selfe good. For where the *Romans* had these victories against the *Macedonians*, he asseigneth this to be the cause, that the *Phalange* at the time of the fight had not the proper place, ground enough, and can meete the enemy with a right front, he holdeth it not possible to be toyed, being divided, and in places uneven, he is of opinion, and experience hath taught, it may easily be put in a route. ⁷ *Plutarch* compareth it for strength (so long as it is one bodie), and maintaineth the *Synaspismes* jointly to an invincible beault, being dispersed, he saith, it looseth the force in the whole, and in every man particular, both in regard of the manner of arming, and also because the violence of it consisteth rather in knitting of all parts together, than in particular of any mans valour. Three battails (to *Plutarch* *duces scirmiebat*), I find the *Romans* in *Spain*, and therein foyled the *Macedonians*; Once against King *Philip*, the sonne of *Demetrius*, and after against *Antiochus*; the third against *Perseus* the sonne of King *Philip*. For *Philip* overthrew them, when they were beaten by *Pylarchus* in the *Armenian* wars. ⁸ Philip breaking up the *Phalange*, and not using the whole together, but fighting against the *Romans* with the right winge only, yet had the better, and was too hard for that part of the *Roman Army*, that joyned with him; but the other winge comming into the field, fit rather for *armes*, than a fight, and not being able to order themselves *Phalange* wise, were soon defeated, and the *Roman* victorious, fell upon the reare of the right winge (where *Philip* was), and had now gotten the victory, and lay upon the field. ⁹ *Antiochus* could not in the ordering of a *Phalange*, true that he was more hardy, than his *Phalange*, and being to fight with *L. Scipio*, where he had the advantage, given full scope, an hee needed the front of the *Phalange*, by making it a disadvantage of match in the front of the *Romans*, and after his horse were beaten, gave facilitie to the enemy, in overthrowing him, and his horse were beaten with *Pudus* *Amilius*, where the *Phalange* continued in the right figure, how many of the *Romans*, and forced them to retire, but following on too eagerly, he came to an

CHAP.

even, and rough ground, wherein the *Phalange* being disordered, left spaces, and breaches for the *Romans* to enter and defeat it. So long then, as the *Macedonian Phalange* had fit ground, and the right property of embattailing, it stood fast against the *Romans* the greatest soldiers that ever were, being in their hands, that knew not how to use it (as a sword in the hands of a child) it yielded to time and fortune. The cause of the strength of the *Phalange* is assigned to be

2 The manner of embattailing. Which consisteth principally in ordering of Targets, and pikes; in closing of the Targets by *Synaspisme*, and in joint charging of the pikes; which lying out thicke from the front, besides the horror of the sight, give almost an impossibility to enter the *Phalange*. I have alledged the judgement of ¹ *Æmilius* *Plutarch* in *Æmilio* concerning the sight presented by a *Phalange*, when the pikes lie so charged out of the front. ² *Polybius* thinketh nothing can resist the force thereof. ³ *Livy*, albeit many times more than partiall to the *Romans*, yet in the selfe same fight betweene *Perseus* 764. A. and *Æmilius* giveth his judgement thus of the *Phalange*: The second Legion (saith he) ininuated it selfe into the middle empty place, and so broke afunder the *Phalange*. Neither was there any more evident cause of victory, then the fights in diuers places at once, which first troubled the *Phalange* in turning many waies, and afterward plainly disioyned, and scattered it; whose forces being vnited and rough straine it to bring about the pikes immovable through length and weight, it entangled it selfe with confused crossings. If at one time you charge it both flanke, and reare, they fall afunder like a ruinous building. As then they were compelled many waies to answer the *Romans*, and so to breake their battaile into many parcells. And the *Romans* vpon the first opportunitie of a breach straight waies conveyed in their troupes, who if they had met the enemy in front, had runne vpon the pikes, as in the beginning it hapned to the *Pelignans*, being too forward to cometo hand, and could not have resisted the *Phalange* fast shut, and ferred vpon the encounter: thus *Livy* concerning the *Phalange*. Who albeit a *Roman*, holdeth the same opinion that *Polybius* doth. ⁴ And in another place telling of *Philips* encamping, he saith, he was lodged in a woody plot, which was vnfit for the *Phalange*, especially of the *Macedons*, which vnlesse it callt the pikes, as it were, a muniment before the Targets, (and that cannot be, but in open ground) is of no great use. So then if Pikes may be charged out before the Targets, the *Phalange* is of great use. But, that I may not seeme to rely vpon bare opinion, let vs heare by an example, or two, the experience of the Pike, and Target of the *Macedonian* against the *Roman* armies. ⁵ When *T. Quintus* *Flaminius* the *Roman* Consul had druen King *Philip*, and his army from the *Streights* neare *Antigon*, seeing that the enemy kept himselfe with his strength, and abstained from the field, he determined to try the *Cities of Thessaly*; and having wonne some by force, some by feare, he came before *Rhage*, and besieged it. He found the siege longer, and more difficult, than any man would hardly have beleueed, he could. For he imagined that all his labour should be in throwing downe the walls. If once he found a passage for the Army to enter, there would after be nothing else, but flight and slaughter, as is wont in wonne *Cities*. But after that part of the wall was throwne downe with the Ramme, and the *Armie* entred the *Citie* by the breach, it was the beginning of a new and fresh labour. For the *Macedonians*, that were there in Garrison, being many, and chosen, thinking it also a glory to them, if they could defend the *Citie*, rather with

H 2

armes

armes and valor, than with wailles, *ferring* themselves close together in a deepe *Phalange*, when they perceived, that the Romans began to enter the breach droue them out, the place being cumberlome, and hard to make a retreat. The *Consul* much offended therewith, and thinking that shame concerned not only the delay of winning one Citie, but also the state of the whole warre, (which for the most part dependeth upon moments of small matters) purging the place which was heaped vp with the fall of the halfe-ruined wall, advanced a Tower which in many stories was fluffed with multitudes of armed men, and sent besides *Cohorts* vnder their Ensignes to breake with maineforce (if it were possible) the body (they call it the *Phalange*) of the Macedonians. But the kinde of weapons and fight was more aduantageous for the enemy, than for the Romans; especially in that place, which was narrow, and streighted with the small space of the ouerthrowne wall. When the Macedonians, *ferring* themselves close, had charged pikes of a great length before their front, and the Romans, after their darts throwne in vaine against the *testudo* compacted, as it were, of the thicke knitting together of the Targets, had drawne their Iwards, they could neither come vp close, nor cut a funder the pikes. And in case they cut the heads of, or broke any, the Reale amongst the rest of the whole pikes filled vp the roome with their sharpe fragments. Ioyne that that part of the wall, which was yet whole, secured the enemys flanks on both sides; neither needed they much ground in retiring or aduancing to charge, which things are wont to cause the breach of array. There also fell out a chance which increased their hopes, and spirits. For the Tower being driven on vpon a rampier, that was not well rammed vnderneath, but had loose earth, one of the wheeles sinking deeper into the ground than the rest, made the Tower to nodd, & lie of one side, that both the enemy beleued it would fall, and they within it were pained in a pitifull feare. When nothing succeeded well, the *Consul* was euill appeare, that the Macedonian souldiers, and kinde of Armes, might seeme matcheable to his, and seeing no great hope of speedy winning the Citie, and that the place was vnfit to winter in, raised his siege. So here the Macedonian souldier is not onely equalled, but also preferred before the Roman, and that only by reason of his armour, the Pike and Target. *In other experience fell out in the battail between Perseus, and Emilius, whereof I spake in this Chapter. The storie is this:* The Romans comming to ioyne battail with the Macedonians, and not able to come vp to them by reason of the length, and joint use bearing of their pikes. There was one *Salinus* a Capitaine of *Pelignans*, who rooke the Ensigne of his Company from the Ensigne-bearer, and throw it into the Macedonian *Phalange*. The *Pelignans* ranne in heapes to the place (for it is not lawfull, nor honest, for the Italians to forsake their Ensignes) where the medley brought forth wonderfull effects. For the *Pelignans* fought with Iwards to put by the pikes, and to presse them downe with their Targets. And ceasing vpon them to pull them out of the hands of the Macedonians. The Macedonians contrary wise, maintaining their charge with both hands, and striking such, as approached neare, thorough the bodies, armes and all, neither Target nor Carace, being able to sustaine the violence of the blow, turned topsy-turvy the bodies of the *Pelignans*, who not with reason, but with the rage of wilde beastes, threw themselves desperately vpon wounds, and vpon certaine, and fore scene death. So the storme falling, the followers began to slacke. And yet they fled not, but retired to the mount called *Olacrus*. I will out of Appian ioyne a third experience in the battail of Antiochus

against

against L. Scipio, which I likewise touched before in this Chapter. As soone, as the Horse, and Chariots of Antiochus were put to flight by the Roman horsemen, and by Eumenes, his *Phalange* of foote being destitute of horse, first opened, and receiued the light-armed, (that had all this while fought in the front) into the midst of it. Then after-ward againe closed. And when Domitius Scipio's Lieutenant, encompassed it round with horse and light-armed, which he might easily doe, by reason it was thrust vp into a thicke *Plinthum*; it was driuen to great distress; being neither able to charge the enemy, nor yet to countermarch in so great depth, as it carried. It grieved them much, that their long experience notwithstanding was subiect to arrows, and darts at all hands. Yet, baring out a multitude of pikes and still made a countenance, as though they meant to charge, keeping themselves for all that within their Ranks, as being footmen, and heauy armed, and they were loth to breake the thiknes of their battail, which forme they could not now alter. The Romans also, durst not approach them, and come to sword, fearing their experience in warre, and closeness of array, and desperation. But none was throwne in vaine, falling amongst a troupe so closely put vp together, that they could neither auoide, and decline any thing throwne, nor giue way, albeit they saw it coming. At last being weary, and irresolute what to doe, they retired easily, with a threatening countenance notwithstanding, and in good order, and not deliuering the Romans of feare, who durst not yet come neare, but sought to annoy them aloofe; till the Elephants placed in the Macedonian *Phalange*, being affrighted, and not to be ruled by their Gouernours, troubled all, and gaue occasion of flight: *hitherto Appian. Out of these three examples, the truth of that, which Lician saith, is to be seene, that is, that the Macedonian Phalange cannot be forced, or resisted by an enemy, (taking with all Polybius his caution) if it be in the right posture, and figure, and haue such ground, as is fit. The Romans the best (souldiers of all antiquitie were repulsd by it at a siege, forced to retire in a battell, durst not come neare it, after they had gained the field of the rest of the Army. And the Consul Emilius, a man that had seene much service, and fought many a battail a fight, as when he beheld the Phalange advancing into the field, the bodies ioyned, the Targets fetted, and locked together, darting out fire like lightning, the front rowe with couched, and charged pikes, and armed with yron, and threatening present death to him, this durst approach.*

3 Occupying two Cubits of ground] We may not take it, as though the souldier betwixt file, and file had two Cubits, or three foote of ground. For we learned before that in locking vp the Phalange, the distance betwene man, and man in front was but a Cubit. But it is to be understood betwene ranks and ranks. For Polybius saith, that the souldier ought to haue room for the use of his weapon, which cannot be, without granting him three foote behind, the pike being some-times to be pushed forward, some-times to be drawne backe, sometimes otherwise handled, as occasion of fight shall require.

The length of the Pike is 16 Cubits] A Sixteene Cubits, which is twenty four foote, is a great length for a Pike, and it verifieth the words of Livy, \$. 1 . & cap. 6. that the Macedonian Pike is vnwealdy, by reason of the length, and weight;

H 3

yet

1 Polyb. lib. 2. 1. Chalybes
pikes were about 15 cubits long. * But 16 was the length at the first, the Macedonians brought it to 14, which they took to be a sufficient length against the enemy, and easier for the Pike-man to care and handle.

4. The space in charging betwixt the hands taking vp two cubits. Herein is a difference betwixt *Ælian*, and *Polybius*. *Ælian* would have none, then 2 cubits left; charging; * *Polybius* saith 4 are left, and with *Polybius* agreeeth *Leo*. But the cause of the difference ariseth out of the forme of the pike, and of the manner of holding it in the charge. If it be held at the butt end with the right hand, and supported toward the armed end with the left, as the manner in charging is, it cannot so far above two cubits, and *Ælian* is in the right. But if, in holding it, you set the right hand 2 cubits from the butt end, then must 4 cubits of necessity be left. Whereof 2 rest behind the right hand, the other two are taken up by the space betwixt both hands. Our manner of charging is at this day, to take the butt end in the right hand, and in so doing we lose but two cubits. But it seemeth our pikes are not made in that forme, they were in *Polybius* time. In *Polybius* age they had weight his at the butt end to make the sharpe end the lighter, as the heauie pummell lighter eth the sword in handling. * This weight was called *h* secuma, as it were a counter-weight to the heauiness, and length of the pike. Nei her do I read any thing elsse where then in *Polybius*, concerning the counter-weight of a pike. To the handle of an Oare, I finde in *Ælian* *Athenues*, that lead was added, to make the part standing out from the shippe more lighter. But yet *Polybius*, and *Ælians* opinions may well agree, and in pikes that haue counterweights at their ends (the hold for charging being taken two cubits from the butt end) there may be left four cubits, where the other sort being held at the butt end it selfe, lose but 2 cubits.

5. The pikes of the other behinde, cannot reach to the first ranke. How shall they beare their pikes then? * *Polybius* sheweth, what the manner was. Those ranks, saith he, that stand behinde the fifth, can helpe nothing to the fight in front. And therefore they charge nor their pikes low, but beare them towards their foremost shoulders, the points somewhat erected to secure the battaile from above, intercepting by their thicke living the misliue weapons, which flying ouer the front, would otherwise fall vpon their heads, that are placed toward the reare. *Polybius* saith the manner was (neither to charge, nor order their pikes, but) to beare them forwards (sloping towards the shoulders of their companions before. Test by beariu them so, what security they could haue from the misliue weapons, that came aloft. I cannot yet conceiue. An arrow, dart, or stone, whelpe it hit iust on the middle of the pikes, would do as much, and sometimes more, harme by glancing, then if it had not touched them at all.

Some would haue the hinder pikes longer. The opinion of them, whom *Ælian* here speaketh of, hatte little reason to ground vpon. For either the pike of the first ranke come in the first ranks behinde, especially the two last, must exceede in length, or elsse the file-leader pikes in fortresse, both which are like vnprofitable. If they be too long, they cannot be wielded, if thise too short, the enemy shall reach the file-leaders, and not the file-leaders the enemy. The measure of the longest pike was 16 cubits, which yet for assistance was by the Macedonians reduced to 14. Say then the sixteenth ranke carryeth pikes of 16 cubits; two of the cubits according to *Ælian*, are taken away in handling, of or by reason of the distance of the file's former ranks. Four cubits alone remaine, and reach ouer the front. If the file Leader in the front shorten his pike to four cubits to make an euen extension, he shall not come neere the enemy by ten cubits, who in pushing will reach home to him. For what length sooner, is taken from the file-leader in front,

front the same is giuen to the enemy, that posseth with him. And hee shall bee able to wound the file-leader, and not the file-leader him, especially the pikes differing in so great a proportion.

6. The superordinarie Lieutenant of euery Syntagma. I haue before noted the duty of a Lieutenant of the Syntagma, and it is here well expressed by *Ælian*. He, that desireth to see more touching the same, let him resort to *Xenophons* *Cyropædia*: lib. 3. 28. and lib. 7. 178. B. and to *Leo*, cap. 14. § 79.

The place of the light-armed, and the number of euery file.

CHAP. XV.

THIS much of ordering and marshalling the armed-foote. I will adde a word, or two, of the light-armed, or naked. * The Generall is to place the light-armed so, that they be readie for all attempts of the enemy, sometime in front, sometime in flanke, sometime in the Reare, according to occasion or necessity. For our purpose let them be thus ordered: We will frame also of them 1024 files as many, as the *Phalange* of the armed contained; So that the first file of the light-armed be placed directly behinde the first file of the armed, and the second file behinde the second, and so the rest. * Yet shall they not be fixtence to the file, but halfe so many, namely eight; so that in 1024 files there shall bee eight thousand, one hundred, ninety two men.

Notes.

HERETO all things concerning the arming, filing, embatteling, number, command, distance and precedence of the armed are declared; and likewise, of the arming of the light and somewhat of their place. Now followeth the filing, ranking, and place more exactly, and their manner of embattailing, with their seuerall bodies, and commands.

The Generall is to place. I haue spoken somewhat before of the placing of the light. I will now onely adde a passage of *Leo* touching the same. * *Leo* saith thus, you shall range the Archers behinde the reare of euery file according to the number § 69. of the file, (that is four light for twenty six armed, proportioning an Archer for euery four armed. Or if it be needfull, you shall order them within the files, an armed, and an Archer. Sometimes without the wings of the battaile; that is within the Horse. Oftentimes without the Horse a little distance, with a few Targetiers, to defend the vttermost flanks of the Horse. And this is to be done, when you abound in multitude of light-armed. But those, that vse small darts, and iaculins, and such like are to be placed, either in the reare of the armed, or in the wings of the battaile, and not in the midst. The slingers are alwaies, to bee set in the wings. Thus *Leo* placeth his light armed. But *Ælian* here (as before in the *Ælian* Chapter) defendeth their place in the reare, but so, that hee leaueh it to the Generalls choice, and to the occasion of service to place them, as most befitteh. Being set behinde, as *Ælians* order is, they must answer the armed in number of files, & be directed by the files of the armed for their standing; that is euery file of the light-armed is to order it selfe in a right

right line after a file of the armed in such manner, as the armed are before embattailed.

Ælian in the beginning divided the foote into three parts, Armed, Targetieers, and light-armed. To the armed he hath given place, and maketh the Phalange to consist of them, the light-armed he rangeth in the reare of the armed, what shall become of Targetieers? for he speaketh not a word of placing them. By that I read in Artian I would think, they were placed amongst the light-armed, and next to the armed. First because Ælian saith, many number them amongst the light. Then I see the Hypaspistis placed betwixt the Horse, and the armed in Alexanders fields at Granicus, at Issos, and at Gaugamela; Lastly Leo in the passage before recited, when he placed the light-armed without the Horse, he sayeth Targetieers with them, for their safeguard. ^b Cyrus likewise placeth them next the armed in the reare; and after them the Archers.

² Yet shall they not be 16.] The file of the light-armed is lesse in number, then the file of the armed. For if they should be 16 in file, the number being but halfe to the armed, they should not be able to make above 512 files, and breeding there by a disproportion both in placing, and correspondence one to an other, not equall the length of the Phalange. Besides standing eight in file, and in the reare, their flying weapons will be sent with more force against their enemies; in as much as the hindermost of them are nearer the enemy by twentie foure foote, which the last eight in a file of 16 deepe take up. And misse weapons, the lesse their compasse is, when they are sent against a marke, with more violence they pierce. As they hurt not greatly, if the distance be too farre, from whence they come.

The names of the bodies of the light-armed.

CHAP. XVI.

Their names and degrees are these. Foure files of light-armed are called ¹ a Syllasis of 32. men. Two Syllasies ² a Pentecontarchy of 64 men. Two Pentecontarchies ³ a Century of 128 men. In every Century ought to bee 5 Superordinarie men: an Ensigne, a Reare-commander, a Trumpetter, a Serjeant, and a Crier. Two Centuries containe 256 men, and are called ⁴ a Psilogy. Two Psilogies a Xenagy of 512 men. Two Xenagies a Syllremma of 1024 men. Two Epixenagies a Stiphos of 4096 men. Two Stiphos an Epitagma of 1024 files. 8192 men. These ought also to haue 8 Superordinarie men, whereof foure should bee Epixenagies, the other foure Syllremmatarchs.

Notes.

As the armed were distinguished, and severed into diuers bodies in the Phalange, so are the light-armed, in whom there ought to be no lesse order, then in the armed. A multitude mingled bringeth with it disorder, and confusion. Neither can any service be expected from them, who by apt diuisions are not cast into bodies fit for service. We haue before spoken of the names of the bodies of the armed, and noted, that they were not imposed with such propriety, that they could be applied to no other thing. At the first warre was made, and men fought (as wild beasts grapple together) led with furie, and rage, and not with skill; and he prevailed that was the strongest. Experience taught there were advantages in Time, in Place, in Order, in instruments of fight, in placing of men, and

in

in other circumstances. Hence sprung the Art of Warre, the diuers formes of weapons, and the figures of Battails. For the speedy framing whereof, the smaller bodies were invented, of which they consist. In building of a house, you first bring timber together, and other materials, and then of it frame walls, doores, windowes, rafters, beames, and the roof, which must be all conioyned together, before the fashion of the house will appear: So in an Army the provision of men was first requisite, which being found, and brought together by Leauies, were armed, and after ordered into severall bodies; and these being compacted together, set out the frame and fashion of the Phalange. And as all things newly invented, stand in neede of names to ascerne them from other things; So names were given unto the bodies not proper and fit; but such as Military wits thought convenient enough to signifie the things they meant. I haue noted it before in the names of the Tetrarchy, Taxis, Syntagma, and other, and it will appear againe in this Chapter.

Rut hin

A Sylla



the armed in such manner, as the armed are before embattailed. The first file of the light-armed is divided into three parts, Armed, Targetieres, and Targetieres, and maketh the Phalange to consist of the length in the reare of the armed, what shall become of Targetieres, a word of placing them. By that I read in Arrian I would think, it sh^d be light-armed, and next to the armed. First because Alian among it the light. Then I see the Hypaspists placed betwixt in Alexanders fields at Granicus, at Issos, and at Gaugame-ge before recited, when he placed the light-armed without the Targetieres with them, for their safeguard. ^b Cyrus likewise placeth the reare; and after them the Archers.

not be 16.] The file of the light-armed is lesse in number, then if they should be 16 in file, the number being but halfe to be able to make about 512 files, and breeding there by a disproportioned correspondence one to another, not equall the length of the Phalange in file, and in the reare, their flying weapons will bee sent their enemies; in as much as the hindmost of them are neerer the front, which the last eight in a file of 16 deepe take up. And mis their compass is, when they are sent against a mark, with more they hurt not greatly, if the distance be too farre, from whence

the names of the bodies of the light-armed.

CHAP. XVI.

degrees are these. Foure files of light-armed are called ^a a Syllaxis. Two Syllaxes ^a Pentecontarchy of 64 men. Two Pentecontarchies 128 men. In every Century ought to bee 5 Superordinate commanders, a Trumpetter, a Sericant, and a Crier. Two Sericants, and are called ^a a Pylagie. Two Pylagies a Xenagie of 64 men, and are called ^a a Syllaxis. Two Syllaxes a Syllaxis of 1024 men. Two Epixenagies a Syllaxis of 1024 files, 8192 men. These ought also to be commanders, whereof foure should bee Epixenagies, the other

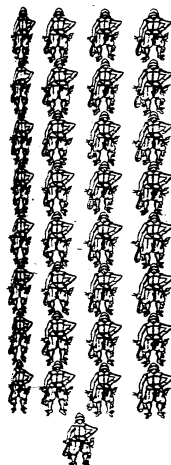
Notes.

distinguished, and seuered into diuers bodies in the Phalange, so as, in whom there ought to be no lesse order, then in the armed. And bringeth with it disorder, and confusion. Neither can any sericant, who by apt diuisions are not cast into bodies fit for service. We have names of the bodies of the armed, and noted, that they were not such, that they could be applied to no other thing. At the first warre of the Persians (as wild beasts grapple together) led with furie, and rage, and wanted that was the strongest. Experience taught there were aduantage, in Order, in instruments of fight, in placing of men, and

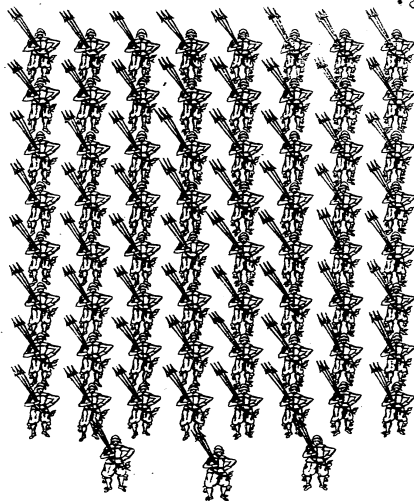
in other circumstances. Hence sprung the Art of Warre, the diuers formes of weapons, and the figures of Battails. For the speedy framing whereof, the smaller bodies were invented, of which they consist. In building of a house, you first bring timber together, and other matter, and then of it frame walls, doores, windows, rafters, beames, and the roof, which must be all conioyned together, before the fashion of the house will appeare: So in an Army the prouision of men was first requisite, which being found, and brought together by Leauies, were armed, and after ordered into seuerall bodies; and these being compacted together, set out the frame and fashion of the Phalange. And as all things newly invented, stand in neede of names to ascerne them from other things; So names were giuen vnto the bodies not proper, and fit; but such as military wits thought convenient enough to signifie the things they meant. I haue noted it before in the names of the Tetrarchy, Taxis, Syntagma, and other, and it will appeare againe in this Chapter.

But here I must not be understood to say, that

A Syllaxis

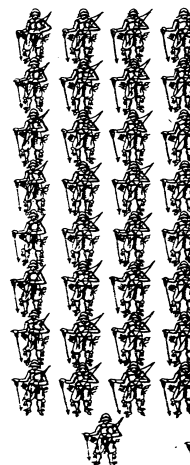


A Pentecontarchy



Cap. 16

The light Armed



The Front

right line after a file of the armed in such manner, as the armed are before embattailed. Aelian in the beginning divided the foot into three parts, Armed, Targetieres, and light-armed. To the armed he hath given place, and maketh the Phalange to consist of them, the light-armed he rangeth in the reare of the armed, what shall become of Targetiers? for he speaketh not a word of placing them. By that I read in Aelian I would think, they were placed amongst the light-armed, and next to the armed. First because Aelian saith, many number them amongst the light. Then I see the Hypaspistis placed betwixt the Horse, and the armed in Alexanders field; at Granicus, at Issos, and at Gaugamela; lastly Leo in the passage before recited, when he placed the light-armed without the Horse, he joineth Targetiers with them, for their safeguard. Cyrus likewise placeth them next the armed in the reare; and after them the Archers.

¶ Yet shall they not be 16. The file of the light-armed is less in number, then the file of the armed. For if they should be 16 in file, the number being but halfe to the

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in other circumstances. Hence sprung the art of Warre, the divers formes of weapons, and the figures of Battails. For the speedy framing, whereof, the smaller bodies were invented, of which they consist. In building of a house, you first bring timber together, and other matter, and then of it frame walls, doores, windows, rafters, beams, and the roof, which must be all conioyned together, before the fashion of the house will appeare: So in an Army the provision of men was first requisite, which being found, and brought together by Leavies, were armed, and after ordered into severall bodies; and these being compacted together, set out the frame and fashion of the Phalange. And as all things newly invented, stand in neede of names to ascerne them from other things; So names were given unto the bodies not proper, and fit; but such as Military was thought convenient enough to signifye the things they meant. I have noted it before in the names of the Tetrarchy, Taxis, Syntagma, and other, and it will appeare againe in this Chapter.

But here I may not pratermit the curiositie of the Græcians in their appellations, and their plenty of speech, apt to give diversitie to things that are divers. For where there are bodies, amongst armed, and light-armed, which consist of the same number, and therefore, as it seemes, might well enough have beene comprehended under one name, they notwithstanding to avoid confusion, and for perspicuities sake have thought good to call them by sundry names. Thirty two armed men are called a Dilochi; 32 light armed are a Syttalis; 64 armed are a Tetrarchie; 64 light armed a Pentecontarchie; 128 armed a Taxis; 128 light, a Hecatontarchie. Our tongue will not afford such variety. For albeit in common speech we distinguish the kinde of souldier, yet confound we the name of the body, and of the command. A certaine number of Pikes under a Capitaine we call a company of Pikes; So many foot under a Capitaine we likewise call a company of foot. The Capitaines, one a Capitaine of Pike, and the other a Capitaine of foot. A company of Curacers of horse, we call a troope of Curacers; as many Argoletes, a troope of Argoletes. The Commanders of either of them we terme Capitaines, the one of Curacers, the other of Argoletes. But let us come to particular explication.

1. A Syttalis] It cometh of Synistemi to stand together: and asyttalis is a standing together; which word albeit it may be extended to any kinde of people assembled, and standing together; yet it is here appropriated to souldiers; and more particularly to 32 files of light armed, consisting of 32 men, 8 men going to the file.

2. A Pentecontarchie] The command of 50 men. And so it was used of old. But the Macedonians gave 64 men to this command, and yet retain'd the name, because it was familiar, and well knowne.

3. A Century] Aelian calleth it a Hecatontarchie, the command of a 100 men. The name was usual before the Macedonians time, and it coneyned 100 men. But the Macedonians gave it 128 men. This was answerable to the Syntagma amongst the armed, and had the like officers. Yet whether it had a Capitaine, or no, may be some doubt; the rather because Aelian in this Chap. nameth no Commanders, but Syttrematarchs, and Epixenagies; and those he would have super-ordinary. For my part, I thinke they had Centurions also. For as every body of the armed had a head, so I would thinke it requisite also amongst the light-armed, especially seeing there was a Bringer-up, and other officers belonging to a Company; which unless they had a Commander, would become unprofitable. For if there were no Capitaine, to whom should the Crier, or Trumpeter, or Sergeant of the Centurie resort for direction? Adde, that the light were often drawne to the wings, to the front, or other places of service, which could not be done without Leaders. For to put a Syttrematarch, or an Epixenagie to lead a Century, were to leave the rest of the Centuries under them without a Commander. Besides, the

the Macedonians were very particular in their commands, and left no body without a head, which is the cause of the multitude of Commanders in the Phalange. But they are not here mentioned. No more are the Commanders of the horse in the division of the bodies of the horse, and yet I think no man will doubt, but the horsemen had Commanders. Lastly, I finde in the Græcian historie, Captaines of the light-armed often named. Epithenes is said to be Commander of the Targetiers, in assault the Græcians had against the Persians. Stratoles commanded the Cretan Archers in the returne of the Græcians out of Perlia. Eurybates Captaine of the Cretan Archers in Alexanders army was slain by the Thebans at the Siege of Thebes. What Antiochus the Captaine of the Archers in a dead Ombrion was chosen in his place. Mention is made also of Arrian of Clearchus the Captaine of the Archers. And when Alian calleth him a Sytremmararchie, and the 4 Epixenages (super ordinary (Εἰσάκτοι) he might have said as much of all the other Commanders. And he saith expressly of the officers of the Centurie, that they were super ordinary (Εἰσάκτοι).

A Pylagi] The word is a body of light-armed. Which word, if it were taken, as it naturally signifieth, is common to, and comprehendeth all the bodies of the light-armed, wherof Alian speaketh in this Chapter. But here it is restrained to a body of light-armed, which comprehendeth 256 men, and 32 files, and so it is to be taken.

A Xenagie] That is, a command of strangers. Alian before saith, that a Syntagma was by some called a Xenagie. I have given my opinion there of the originall of the word, which I neede not to repeat here; This onely I will note, that of all the bodies of the light-armed, no one hath a common name with the body of the armed, but onely the Xenagie. And Alian giveth also that body of the armed another name, calling it a Syntagma. The Xenagie hath in it 512 men, and 64 files.

A Sytremma] It signifieth a conglobation, or trouping together. Proper names are wanting for these bodies, and therefore such taken, as might at any hand, signifie the thing meant. In continuance of time use hath gained a passage, and made them to be accepted as proper enough. The Sytremma containeth 1024 men, and 128 files. There is nothing to be found in Alian of the Chiliarchie of the light-armed; Yet doth Arrian mention 2 Chiliarches of Archers in the Army of Alexander.

An Epixenagie] A command above a Xenagie; As afterward in the command of the horse, there is an Ephipparchie above a Hipparchie. The word is improper and hard enough, but when it is received by use, what should we seeke for more? It containeth 1024 men, and 256 files.

A Stiphos] It is derived from steibo, to thicken, and in penny of an other name, this body of the light-armed is called Stiphos, because they are thickened, and thronged together. There is in it 4096 men, and 256 files.

An Epitagma] Is the last body amongst the light-armed. The signification of Epitaxis is to place behinde. From thence cometh Epitaxis, placing the light-armed in the Reare, which word is after used by Alian. Epitagma is derived from the same fontaine, and it is called Epitagma, not of placing behinde, (for sometimes they were placed before, sometimes in the flanke, but it was the best name they could give to the whole light-armed. And yet it may be, that because all the light-armed in ancient time were placed behinde, the whole was called Epitagma, as being placed after the armed in there. The Epitagma hath in it 1892 men, and 1024 files, for so many light-armed attend the Phalange.

Eight super ordinary men] Why the eight men should be super ordinary more than the rest of the Commanders, I conceive not yet. If Alians meaning be, that these alone shall command the light-armed, historie and practise of ancient times convince the contrary.

century. Besides where he nameth foure Epixenages, it agreeth with the number, that are in the Epitagma of light. But where he addeth foure Sytremmararches more to make up the number of the eight Super ordinary, it is hard to knowe, which foure he meaneth, considering there are eight Sytremmas in the Epitagma.

Now because the files of the light-armed are in embattailing to be marshalled to the files of the armed, I thought good to set downe, how the bodies of both agree, by comparing them together: files not in number of men, for in number of men they cannot well agree, because the file of the light-armed hath more, then the file of the light-armed. And the number of the armed in gosse is 16384, of the light-armed but 8192. And I will first begin with the Sytaxis, because it is the least body of the light.

The bodies of the armed,

A Sytaxis
A Taxis
A Syntagma
A Pentecostarchie
A Chiliarchie
A Merarchie
A Phalangarchie
A Diphalangarchie
A Tetraphalangarchie

The bodies of the light-armed.

A Sytaxis,	4 files.
A Pent. costarchie,	8 files.
A Hecatomarchie,	16 files.
A Pflagie,	32 files.
A Xenagie,	64 files.
A Sytremma,	128 files.
An Epixenagie	256 files.
A Stiphos	512 files.
An Epitagma	1024 files.

The use of light-armed foote.

CHAP. XVII.

Archers, Archers, and all other, that use flying weapons, are good to begin the fight to prouoke the enemy, to breake and shatter armour, to wound, annoy, and beate downe a farr off, to difarray the enemy, to repulse their horse, to beat in their light-armed, to discover suspected places, and to lay Ambushes. Lastly these first vndertaking the Skirmish, and continuing it with the rest, and following them, and seruing for speedie, and farr-off attempts, worke many, and great effects in fight.

Notes.

The arming, place, filing, bodies, and command of the light-armed are hitherto handled: Now followeth the use, and service they performe in the field. And first we are to thinke of the body of an armie, as of the body of a man, that is compoſed of severall parts: of which some parts are of more use then other. Some being able to performe their function without the helpe of the other, some except the other helpe, can doe nothing to purpose of themselves. The parts of an armie are like. The armed are the strength of the field, and are therefore for the rest in extreme neede. The light armed with the armed, worke great effects: (those which Alian speaketh of in this Chapter and many more) without them they cannot so much as maintaine a place in the field. And Xenophon saith, a Xenophon, Cy. 1.33. C. Let them be neuer so many in number, yet dare they not stand or abide a few armed. In which respect, a place fitly sheweth howe sought for their service, to secure them from the assault of the horse, or of the enemies armed. Which place was either be-

hinde the Phalange (as Ælian here would have it) or else in the wings by twixt the Horse, and the armed, or if they skirmished loose before the front, and chanced to be pressed with the enemy, they retired into the internals, and conveyed themselves behind the Phalange in safety. ¹ Leo saith, if there be any place of strength, it will much helpe the light-armed. For after their flying weapons spent, retreating thither, they will be in more securitie, as a steep rock place, or the banke of a river, or a high hill, or such other. ² Our Historie report, that at the battaile of Agincourt in France 200 English Archers were bestowed in a meadow fenced with a double ditch, from whence they assailed the French horse and foot, that they were a great helpe to the victorie. The like happened before at Poitiers, where that braue Prince of Wales eldest sonne of Edward the third, having to fight with the whole power of France under the leading of their King, gave safeguard to his Archers, with hedges, and ditches, and other strengths. So that the French horse having no access to disorder them, were overwelmed with the tempests, and stormes of their arrowes, and such a victorie obtained by our nation, as might match the most renowned of all antiquitie. To say nothing of the invention which Henrique the fifth used against the horse of France for securing his Archers. The storie saith, he devised flakes of two yards long, and armed both ends with pikes of iron, the one to sticke into the ground, and the other to gall, and enter the horses bellies, in case they came to charge our Archers home. By means whereof he carried the famous victorie of Agincourt. Thus for the assistance of the light armed, when they come to fight, without which assistance, their service would be weak, and scarce worth the having. Their service then according to Ælian hath many particulars. And they are good to

Prouoke the enemy. If the enemy be in a wood, as fence, a hill, a fort, a town, or other place of strength, that admitteth no access, the manner hath bene to send out the light armie to show themselves, and with a bravado to towle him out of his advantage, and bring him into the field, where he may more easily be dealt withall. Examples are plentiful, but I will content my selfe with a Macedonian example. Alexander leading his armie against the Triballs, that had hid themselves in a wood, commanded his Archers, and Slingers to runne out, and to shoote, and sling amongst the Barbarians to see, if he could towle them into the plaine. The Archers, and Slingers spared not to let flye, and the Triballs being wounded with arrowes, threw themselves out of the wood with all speed, to fall vpon the vnarmed Archers. Alexander presently commanded Philotas with the Horse of vpper Macedonia to charge the right wings, on which part they caft out themselves furthest. And Heracles, and Sopolis with the horse of Bottia, and Amphipolis the left, himselfe stretching out in length the Phalange of foote, & setting the rest of horse before the Phalange, led against the midst of the enemy. As long as it was but a skirmish, the Triballs had not the worit. But after the Phalange close ferred came vp roundly to them, and the Horsemen charged them no longer with darts, but pressed, and overborne them with their horse, they fled thorough the wood to the river.

To beginne the fight. ¹ Leo agreeth. If saith he, we have light-armed enough, let them, before the armie ioyne, send their darts, and arrowes at the enemy, and after the fight of the armed is begonne plie the flanke with their misfue weapons, that at once both their flanks may be assaulted. It hath bene and is now the ordinarie course to beginne the fight with the light-armed. And because wee shall read of no battaile almost wherein it was not so, I will forbear examples.

To wound a farre off. The light service great purpose, if the Generall desire not to come neere to fight, but seeke to annoy his enemye a farre off without danger of his own folkes. Liuy telleth of Cn. Manlius Volso, that being to make warre against the Gallo

Græcians, that fled into the mountains, and awaited the Romans there, and sought to defend themselves, by advantage of the place, he prepared great plenty of darts, arrowes, bullets, and small stones for slinges: and leaving his legions fulliers behind, led his light-armed, against the enemy, that possessed certaine strong holds, by which his armie might passe. After some fight the Gallo-Græcians being not sufficiently armed, to defend their bodies from the misfue weapons, the light-armed of the Romans forced the passage, and following them euen to the Campe, where their Companions came to their aide, they first drew them into their Campe, and after the Legionarie Souldiers coming up, they wonne it. I have before rehearsed the historie of Epibacates, who with his Targetiers (that can: seldome to hand blowes, but plied the enemy with darts a farre off) ouerthrew and leuie a whole Moira of the Lacedæmonians. The Acarnans, likewise with this kinde of fight, much incumbered Ageilaus, that made an excursion into their Countrey. The story is this, Ageilaus having taken a great prey, in the territory of the Acarnans, rested that day, where he had taken it, being busie in selling of it. In the meane time many Acarnan Targetieres assembled themselves together, where Ageilaus was incamped upon the side of a mountaine, and with darting and slinging they forced his Campe to descend to the plaine, themselves in the meane time being free from hurt. The next day Ageilaus led away his armie. The passage out of the place was fraught by reason of the mountains lying about in a circle, which the Acarnans possessed, plied the Lacedæmonians with darts, and stones, from the higher ground, and sometimes descending to the skirts of the hills, they pressed the armie so, that it could not move forward. And when the armed, foote, or horse, fell out vpon them, they proffred little: For the Acarnans retired immediately, to their strength. Ageilaus perceiving it would be hard for his armie to winde out of those straights, so long as the enemy lo hung vpon them, resolved to charge those on his left hand. For the ascent on that side was more easie, both for his horse, and armed foote. Commanding therefore, his men to charge, the armed of 29 yeeres of age first fell on, and the horse after them vpon the spur. Himselfe followed with the rest. The Acarnans therefore, that were defended, and busie at darting, were quickly put to flight, and many flaine in seeking to remount the hills. But their armed foote, and most of their Targetiers, stood imbatailed on the toppes, and from thence both threwe other misfues, and lanced lauelines, wherewith they wounded horsemen, and killed some horse. But being ready to be charged by the Lacedæmonian armed, they fled, loosing some 300 in the flight. These light-armed then, as long as they can keepe aloofe from the enemy, annoy them sore by wounding (as Ælian saith) a farre off, as some as the armed come up, they are glad to quite their place, and save themselves by flight.

To disarray. So long as a battaile remaineth in order, no victorie is gotten against it. Breaking of array, and disbanding, are companions of flight, and of forsaking the field. The armed, that are to endure the efforts of the light armed, must either keepe still their order, and suffer themselves, to be knocked downe, and flaine, as they stand, or else provide for themselves, by flight, or by yielding. For the light-armed effect with their misfue weapons the one, or the other. An example may be seene in the Egyptians in Cræsus his battaile, who after the defeat of the rest of the armie, maintained yet the fight, and yielded not to Cyrus, though he had now the victorie. Cyrus at this charged their backs with his horse, and being not able to breake them, was faine to command his Archers, and darters, to shoote and cast their darts at them: whereby the Egyptians after many wounds, and lesse of their people, were finally constrained to yield. A like example is before alledged of Domitius the Lieutenant of L. Scipio, who with misfue weapons alone forced the Macedonian Phalange to scatter, and take themselves to flight.

Æ Xenoph. Hist. Græc. lib. 4. 513. D.

Æ Xenoph. Cy. 10. 1. lib. 7. 178.

Æ Appian. in Syria lib. 2.

Æ Leo. cap. 14. § 121.

Æ Arrian. lib.

Æ Leo. cap. 14. § 104. Cn. Decad. § 113. 350. B.

Æ Liue. lib. 4. 18. 181. B.

The Tactics

f Xenophon
Cyrop.

e Plut in Ant.

d Lucan. lib. 1. c. 6. A. B.
e Marins de
Bell. German.

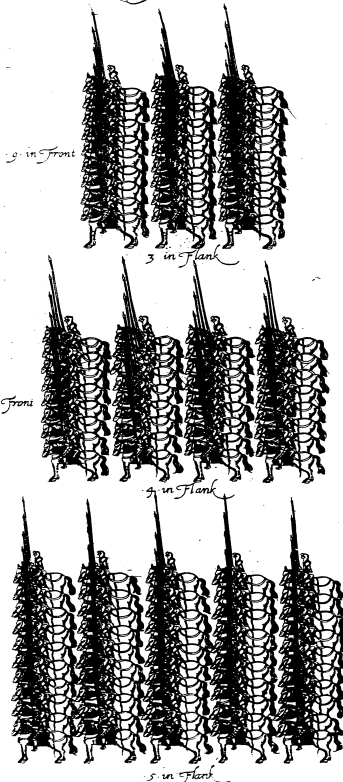
5. To repulse their Horse. The light armed alone, without a fur, retreats to the arms, or else some place of strength, can do a little in repulsing of horse. I have showed before in the exploits of Crassus into Partia, how the light armed were beaten only by the Peritian horse, and by the blow of wounds, they received, and with their fears, discomaged the armed. The like happened in Antonies retreat out of Partia, the light armed being same to trouble themselves from the Peritian horse within the Phalange of the arms. But they neuer so many, without some such assurance the horse will soon overcome them; having this assurance their service much assisteth horsemen both in wounding them, and in killing their horse. I therefore of ancient time it was usual to mingle horse, and light armed together. For the enemies horse so charged, cannot be able to resist both. A notable example is in H. Hirtius: Caesar, saith hee, having a iourney in hand, and but a small number of Horse, and legionary Souldiers, was in his way set vpon by the enemy abounding in store of Horse, and of light armed Numidians amongst them. And when the Souldiers of Caesar tell out to charge, the enemies horse galloped away, and the foote stood fast, till the Horse with a full career returned to the rescue. This kinde of fight troubled Caesar much, and would have troubled him more, had hee not recovered hills that were not farre off, and by that means shooke off the molesting enemy. And for repulsing horse there is no better meanes for the armed foote, then with the light armed to line that part of the battaile, where the horse shall be about to give on.

6. To beat in the light armed. The light armed being nimble and quick, and seeking alwayes advantages by changing of ground, can neuer be forced by the armed foote, (who are charged with heauie furniture, and by reason thereof can make no speed) to seek succour in the battaile of their armed. Either they must be beaten in by the horse, or by the contrary light armed, as Aelian hath heere. The Horse are commonly to encounter with Horse, and the light armed with light armed, amongst whom the greater number preuaileth, their skill, and armes being alike. For the fight being a farre off, many will sooner wound, or kill a few, then a few many, saith Xenophon: If the fight bee at hand the better armed, or better minded will drine the other out of the field. The Roman Horse, and the light armed, were too hard for the Macedonians, and chased them to their Campe. And that happened by reason their armour was fitter to close, and to fight at hand. So our Archers at the battaile of Cressly compelled the Genna crossbowes to forsake the field, the english horse being better in close, then the Genna crossbowes. When they haue made the contrary light armed to quit their place, they are at liberty themselves to seue, where most advantage may be had of their service.

7. To discover suspected places, and lay ambushes. Suspected places are such for the most part, as ambushes are laid in. Ambushes are of two kinde, being laid either to endamage the enemies battell in the field, or to hinder, and disaioynt his march. The places, such as are removed from sight, and had neede of special discovery, as woods, mountains, forests, rocks, bankes of rivers, caues, hills hollow, and deepe waies, and the like. The most part of which are rough, and intricate, and scarce passable for the heavy armed, and horse. But the light armed, that are not incumbered with weight of armes, can quickly to advance, or retire, are fittest to lie close in such places, or to search if the enemy be so long as there. For the first kinde of Ambushes wee read, that both heavy armed, and horse haue been employed. The warre of Anniball in Italy afford plenty of examples herein. For the other, which is to be set or discover waies, there are none so fit as the light armed, whose quicknes, and expedition, giveth them advantage to assault their enemy with their misine weapons, thought against be neuer so unequal, and meanes to view any place suspected without almost any danger of their owne.

S For

The Square



8 For speedy and farre attempts] *A bewic armed man is not fit for farre or sūdaine attempts; he is armed for a firme and stedfast fight, and not for concursations.* Alexander, whensoever he was to use expedition, tooke with him the horse and light-armed, leaving the armed to come after. ^a So did he, when he oppressed Clytus, and Glau-
 cias in their campe. ^b so when he possessed himselfe of the straights of Cilicia; ^c so in pre-
 venting of the burning of Tarsus; ^d so in seeking to take the straights of the Vxians;
^e and the gates of Perlia; ^f and the rocks of Aorne. The same hath bene the manner of
 other Generalls, as I have noted in other places. For when Celerity is requisite, who so fit
 to be employed, as they who haue nothing to hinder their speed. ^g The Targetiere had but
 a light target, and a spere; the lightarmed but their arms. ^h And what are they? bowe,
 and arrowes, darts, and slings, which haue no weight in them. ⁱ Which was the reason
 also, that in victory they were employed in giuing chase to the enemy, that had lost the
 field. The armed vsed to follow in good order of battell, the slaughter, and execution
 was deliuered to the light armed, and horse. Wherein notwithstanding the counsell of
 Iphicrates was held good; take heede (said hee, to his light armed) of ambushes,
 and spare not to presse hard vpon the reare of those, that flie, till you come to
 riuiers, or straights, or ditches. For it is dangerous in such places to hinder the
 enemies flight, least feare turne into desperation.

a Arrian. lib. 1.
 7. D.
 b Arrian. lib. 2.
 3. E.
 c Arrian. lib. 2.
 3. E.
 d Arrian. lib. 1.
 3. E.
 e Arrian. lib. 1.
 6. D.
 f Arrian. lib. 1.
 6. D.
 g Polyen. lib. 3.
 1. Iphicrate
 h Xenoph. de
 exped. Cyr.
 lib. 1. 2. 5. B.
 i lib. 7. 4. 10. A. B.

The fashion of Horse-battailes: and first of the Rhombes,
 the Wedge, and the Square.

CHAP. XVIII.

Those, that haue written before mee, haue diuersely framed *horse-battailes*, some of iust squares, some longer in flanke, then in front, some like a *Rhomb*, some like a *Wedge*, but none of them haue (if I may speake freely) expressed fully their owne conceits. Therefore to make all things cleere, and better to be vnderstood, I will set downe the severall figures of each severall kinde.

¹ It seemeth the *Thessalians* whose power was great in Horse, were the first, that vsed the kinde of battaile ² fashioned in forme of a *Rhomb* (the inuention whereof is attributed to *Ision*) as fittest for all encounters; The *Horsemen* thus ordered being ready to turne their faces every way with speede, and not easie to be surprised in flanke, or in the Reare. Because the best men stand in the flanke, and the Commanders in the Angles, as namely the Captaine of the troupe in the front, and in the right, and left Angles those, that are called Flanke-commanders, and the Lieutenant in the Reare-angle.

³ The *Scythians*, and *Thracians* haue vsed *Wedges*, and likewise the *Macedonians* by the ordinance of King *Philip*. For this kinde of battaile was held of more account, then the *square*, because the Commanders are placed in a circle; and consisting of a narrow front, it maketh readie passage thorough any distance, and an easier wheeling and returning to the first posture; as hauing no such troublesome windings about, as hath the *square*.

⁴ The *Persians*, and *Sicilians*, and most *Gracians* made choice of *Squares*, being of opinion they were more easie to frame, and fitter for ioint-mouing of the Horse, and more effectually in use. For they are sooner in order being digested
 into

into files, and ranks, and in this order alone all the Commanders fall vpon, and charge the enemy with one maine force. Those are best *Squares*, that double the number of the length to the number of the depth. As when there are eight in length, and foure in depth, or tenne in length, and fīue in depth. These in number are of vnequall sides, but in figure foure *Square*. For the length of a Horse from head to taile compared with his breadth requireth more men in rank, then in file [to make vp the *Square*] Some allow thrice as many in length, as in depth, and thinke by that meanes a perfect *square* may be formed: because for the most part, the length of a Horse exceedeth thrice as much, as the breadth betwix his shoulders. Therefore they giue nine in front, and three in flank. For a multitude of Horsemen yeeld not the same aduantage behinde, that foure doe, when in the depth of the Battaille they iointly thrust on; in as much as the Horse helpe nothing to the settlednesse of fast resistance, being neither able to thrust those forwards, that are before, nor yet to linke, and knitte with them, and so to make one weight, as it were, of the whole body: and in case they presse vpon the formost, by disordering, and distemping their owne Horse, they annoy themselves more, then the enemy. Therefore it alwaies falleth out, that when there are as many Horse in length, as in depth, a *Square* of number is made, but the sides of the figure are vnequall, the depth exceeding the length in proportion: but when the figure of the Troupe is *Square*, the number of the sides and front, is vnequall.

Notes.

In the second Chapter of this booke, the armie was diuided into two kinds, footemen, and Riders. Footemen againe into three, armed, Targetiers, and light armed. Of these three is hitherto treated. Riders follow, who either used Horses, or Elephants. Horses either alone, or else in Chariots. Of these Elīan treateth generally hereafter. For the arming, and place of Horse in the fīelde, see hath sufficiently spoken already. The following discourse is: First, of the manner of embattailing horse (wherein he setteth downe the diuersity of vjage in ancient time.) Then of Chariots, and lastly of Elephants. * That a horse is a kinde of beast, that loues man, and is most faithfull vnto him Pliny testifieth. The vse of him is for carriage, and for seruice in the fīelde. And in the seruice of the fīeld an armie without horse, is in a manner no armie. Iphicrates (as I haue said before) comparing an armie to a mans body resembleth the horse to feete. And as the body hath no power of moving, or rather removing, the feete being lame, or taken away, so is the armie slow, and vnfit for expedition, that is destitute of horse; and may be well resembled to those beasts, that creepe vpon their bellies, whose greatest hast is with little speede. The horse do great seruice in the fīeld of themselves alone; and are principally employed in matters that require quicknesse in dispatch. Therefore are they fit for discouries, either of the enemies country, or of his campe, or of his marche, or of other things, whereof the Generall desires to haue notice. And not for discouries alone, but to spoile, and destroy, whatsoever the enemy hath growing, to make prey of his Cattle, burne his houses, kill his people, surprise his places of strength, and to emburle him from doing the like to vs; to bring and cause prouision for our Campe, to bat in the enemy, that hee get not out his campe for the causes, to hinder the enemies marche by falling on the reare. Briefely all expeditions of celeritie are for the most part deliuered to the horse alone. Especially as long as they are in such places, as give them liberty to go on, or retire at their pleasures. Yet are they often ioynd with the light armed, as I haue shewed. They often ioyne likewise

a Plin natural.
histor. lib. 7.
cap. 56.

likewise with the armed. * And if they may come to charge the enemies battaille in the flanke, or reare, at such time, as our armed charge in front, they endanger all. But for employment alone against the armed force many examples of former times shew, how weakethere force is. * And how little they preuaile (especially against armed, that are practized in fight, and resolute souldiers) The examples I haue quoted in the margin make the matter cleare. For further confirmation I will set downe Xenophons opinion, which all be it, it were deliuered concerning the Persian horse, that came against the armed force of the Gracians in their returne out of Persia, get the reason stretcheth to all horse in general. His words sound thus: * If any of you faint in minde (saie he to the Gracians) because we haue none, the enemy many horse, let him consider, that ten thousand horse-men are no more, then ten thousand men. For no man was euer flaine in battaille by bying, or stroke of a horse: Men they are, that performe, whatsoever is done in fight. As for vs (the foote he meaneth) our mounting is much more firme, and steadfast then theirs. They hang vpon their horse, and are in feare not onely of vs, but to be shaken of and throwne to ground. We contrariwise haue stable footing, and shall be able both with great assurednesse to strik, and direct our aime with more certainty. One aduantage the horse-men haue, they may more securely runne away. Hiuberto Xenophon. And so much is summarily spoken of the seruice of horse.

In the Thessalians, whose power was great in horse [The Thessalians inhabiting about the mountain Pelus were the first, that sought on horse-backe, and were therefore called Centaures. When they watered their horses in the river Peneus, the horse heads stooping to drinke made the vnskillfull multitude, who saw the bodies of men ioynd to the shoulders of the horse, conceiue, that the upper part was man, and the neither Ox. For it should seeme, horse were not so well knowne then, as Oxen, with which they laboured and plowed their land. The Poets therefore fained, that they were monsters compounded of two diuers natures, man and ox, or bull; and that Centaurus, the beginner of the race was begotten by Ixion vpon a cloude, which was figured like Iuno. Homer testifieth Seruius giueh a better original of the name, saying, that certaine seruants of a Thessalian King seeing their masters Neate, raging with the Brimse (a flie that biteth cattell) got a horse backe, and pricking them with goades, reduced them to their stables, and that they were after called Centaures, Para kentein tou tauros, of pricking the neate. The great Etymologicon giueh yet another beginning of the name. For where I haue said that Centaurus was begotten by Ixion vpon a cloude, which was figured like Iuno, with whom Ixion was in loue: The Etymologicon saith, the sonne of Ixion, and of the cloude was called Centaurus: Apo rou ton patera autou kentein ten auran. But Diodorus Sicul. reporting the historie of the Centaures, speaketh not of Centaurs, the fathers of his race but saith notwithstanding, that they were bred of a cloude, and that the Nymphs brought them vp, and that they were the first horsemen, and therefore called Hippocentauri which gave occasion to the fable, that they had two natures. It is generally agreed, that these Centaures were Thessalians, and that they were the first horsemen, that are mentioned in any history. And as they were the first, so by reason of their long practice * they were accounted the best, the most valiant, and the most expert horse-men of all Greece, euen to the time of Philip, sonne of Aminates King of Macedonia, who conquered all Thessaly (saith Iustini) notwithstanding to make himselfe rich of the prey of that Countrey, but to winne to his armie the strength of the Thessalian horsemen. Whose seruice he vsed afterward in all his war. Neither did they lesse seruice to his sonne Alexander, in whose fortune battailes their vertues clearely appeareth, and is especially commended by histories. * Pyrrhus,

a Diod. Sicul.
lib. 16. § 12.
Pel. lib. 3.
266 A. B.
b Herod. de bell. African.
Xenoph. de exped. Cyrc.
lib. 3. § 305. B.
Plut. in Arrian.
Appian in Part.
164.
c Xenoph. de exped. Cyrc.
lib. 3. § 305. B. C.

d Diod. Sicul.
lib. 4. § 19.

e Xenoph. hist. Grace lib. 7.
264. D.
f Flut. lib. 7.
§ 323. C.
g Diod. Sicul.
lib. 17. § 73.
h Xenoph. de exped. Cyrc.
lib. 3. § 304.
i Plut. in Pyrrh.

e Plutarch in
Agefilo.
Xenoph. H. lib.
2. c. 10. 4.
318 A.

The Batticks

thus also, principally by their valor, put the Romans to flight. * Agefilus returning out of Asia towards his Country led his armie through Theſſalie, and bring many incumbered in his march by the Theſſalian horſemen, that were his enemies, hee charged them and overthroweth them, and pleased himſelfe marvellouſly therein, becauſe with troups of horſe, which himſelfe had trained, and diſciplined, hee had overthrowne the Theſſalians, that were (ſaith Xenophon) ſo highly renowned for horſemanſhip.

2 Fashiomed and forme of a Rhombe] There are three kinds of horſe battailes mentioned by Elian, the Rhombe, the Wedge, and the Square. And the ſquare is either a ſquare, or longer in ſlanke then in front, or in front then in ſlanke. The Rhombe was the inuention of the Theſſalians, and in that forme they vſually fought. But where he maketh laſon to be the inuention of it, he afterward expoundeth his owne meaning, attributing the inuention to Ileon the Theſſalian (from whom alſo it was tearmed Ile) but the chiefe praictiſe to Iafon. Euclyde deſcribeth a Rhombe in this ſort :

b Euclyd. lib.
1. deſcript. 31.

* A Rhombe is a ſquare figure, that hath the ſides equall, but the angles not right. That is, the ſoure ſides of the ſquare are of one, and the ſame length, but the points, which make the angles, are two of them ſtretched out in greater length, and become more ſharpe, two of them brought narrower together, and made more blunt, then the right angles of a Tetragonall ſquare. See the figure. It is the ſame figure in a battaile, that at this day we call the Diamond battaile, which is ſometimes praictiſed amongſt the foote for ſport, and euerſe ſake, but amongſt the horſe I haue not ſcene it praictiſed. And as for the ſquare, goeth to charge with all the ſouldiers, that ſtand in one of the ſides, that is with the front, (for the front is but a ſide of the ſquare) ſo the Rhombe chargeth with one of the points, which is the front of the Rhombe. Whether of them is of moſt uſe in the field, I am not to determine. For the ſquare ſtandeth the praictiſe of our daies, beſides the vſage of the Perſians, Sicilians, and moſt Græcians, as Elian ſaith. For the Rhombe the Theſſalians alone (which notwithſtanding were acknowledged the beſt horſemen of Greece) unleſſe we allow the Wedge for a ſpeciall of the Rhombe, (a Rhombe being but a double Wedge, as making two wedges, when it is diuided in two) and then haue wee for the Rhombe none onely the Scythians, and Thracians (both nations very good horſemen) but King Philip Amintas ſonne, and Alexander the great, and his ſucceſſors. Either of both formes haue their reaſons. For the ſquares they, that vſe them, held opinion (as Elian ſaith) that they were eaſier to frame, and ſitter for ioint mouing of horſe, and ſooner in order of file, and ranke, and that the Commanders iointly charged the enemy, which in no other forme could be done. For the eaſieſt to frame I ſee no great difference, onely cuſtome, and vſe muſt in euery forme, yea in the ſquares themſelues make the horſemen ready to know, and ſake, and keepe his place. The ſame may be ſaid for the ioint mouing of the horſe. Now to file and rancke is common to the ſquare with ſome Rhombes, and as ſoone done in the one, as in the other, the number of the troupe being once knowne, and euery horſeman hauing his place aſſigned, and the forme reſolued vpon, into the which it muſt be caſt. For where there are a kind of Rhombes, one, that fileth, and ranketh; another, that fileth, but ranketh not; the third, that ranketh, but fileth not; the laſt that neither fileth, nor ranketh (as Elian teacheth in the next Chapter) The firſt will finde no more difficultie of ſetting, and anking, then the ſquare, the two next alſo the one ranke not, the other file not, yet the want of filing, or ranking hindereth no more the readineſſe of framing them, then the vſe of filing, and ranking helpeth the other. The fourth is rather curious then profitable, as I take, neither doe I finde example of it. And it may be truly affirmed of it, that the ſquare is much eaſier to be faſhioned. We ſhall haue occaſion to ſpeake of the laſt three in due place. Touching the ioint falling on of the Commanders, I confeſſe the advantage is great. For when the beſt man (ſuch as the Commanders ought

of Elian.

to be) altogether fall vpon the enemy, they are very like to put hard to them. And as it is a great part of ſkill to bring many hands to fight, ſo is it no leſſe, to bring the beſt hands to fight. Many hands make light worke, the beſt hands ſore worke. Now for the Rhombe Elian allegeth theſe reaſons. Firſt, that it is fitteſt for all encounters, becauſe the horſemen are ready to turne their faces the beſt men in their ſlanks, and the Commanders in euery point of the Rhombe. And for the Rhombe, which way ſooner faces are turned remaineth in the firſt forme. And whether it be to the right, or left ſlanke, or to the rear, it keepeth ſtill a even ſides, and the men of moſt ſervice in the ſides. Beſides that one point alwaies affronteth the enemy. Not unlike a Caltrop, which howſoeuer you caſt it to the ground, hath one point bearing right vpon to wound the horſes feet: But the ſquare in turning faces to either ſlanke altereth the forme of the front. In a broad ſquare, the front at the firſt was longer than the ſides, faces being turned to either ſlanke the ſides become longer, than the front; contrariwiſe in the Herſe battaile. Beſides in ſuch turning of faces the ſquare leſteth the advantage of embattailing the Commanders, that ſtood in the front, ſtanding now in one of the ſlanks, and being not able to charge the enemy iointly, (the greateſt advantage of that forme) and ſo the front being without Commanders, is ſubiect and in danger of ſurpriſe, where the Rhombe, which way ſooner faces turne, hath as many Commanders in the front, as at firſt. But let vs take the horſe ſquare in full ſtrength with all Commanders in front; whether ſhall that forme be better, than the Rhombe? I dare not affirme it. For where there are two kindes of fight; One with maine force, the other with ſleight, and Art; in the firſt I will preferre the ſquare, in the laſt the Rhombe. The ſquare for ſlaughter and violent overthrowing, the Rhombe for piercing, and artificiall breaking the enemies battaile, which laſt amongſt great Commanders: hath alwaies beene accounted the beſt kinde of winning. In the ſquare all the Commanders fall iointly vpon the enemy, and becauſe they are ſuppoſed to be the chiefe of the Army, in all likelihood they will overthrow the formoſt, and ſlay many. Yet by reaſon of the length of their front, they ſlacke man to man, and can make no farre entrance, and the victorie hangeth doubtfull, till they haue ſlaine the moſt of them, that reſiſt, and ſo make the reſt to ſlie. The Rhombe contrariwiſe, being narrow, and pointed in the front, firſt forceth a paſſage with the point, which maketh way to the reſt that follow, and then without great labour piercing further, and further, breaketh the aduerſe battaile, & diſperſeth, and putteth them to flight, and after doth execution at pleaſure. Neither can I make a ſitter reſemblance, vſed for diuiding ſolid maſſes of wood. For the axe, albeit ſharper, than the wedge, yet hauing the edge drawn out in length, can not by any ſtrength be driuen ſure into the wood, but by doubling many ſtroaks, and by much labour cometh at laſt to diuide it. The wedge contrariwiſe, though not ſo ſharpe, being once entered, inſinuateth it ſelfe more by liſe, and little with the narrownes of the point, and maintayning the hold it firſt got, at laſt forceth it aſunder, though it be neuer ſo tough. So it is in the ſquare, and Rhombe: where the ſquare beginneth, and endeth with violence, the other vſeth firſt cunning, and miſdeane, as it were, to enter: being once entered reſteth a peece, and diſparteth all that ſtandeth in the way. The manner of our times alloweth not of Rhombes; Experience of former times highly prized them. I will inſiſt vpon the Theſſalians alone, who are accounted the inuention of the Rhombe, & fought alwaies Rhombe-wiſe. Polybius had ſene their ſervice, and beene General of all the Horſe in his owne country, and therefore able to iudge. He giueth this cenſure of them; * that in troups, and being in battaile

led, they could not be resisted: to fight man to man in single combat, they had neither will, nor courage. *What then should be the reason, they should be so powerful in troops?* No other, than the form of their embattaling, which form was the Rhombe here mentioned by Aelian. In this form they commonly beat the Græcians, and Persian squares, and got the reputation of the best horsemen of Europe.

3 The Scythians and Thracians used the wedge. The Rhombe is of 4 sides, the wedge but of three: and half a Rhombe maketh a wedge, as will be shewed in the next chapter. The wedge was used by the Scythians, and Thracians, and whether King Philip of Macedonia borrowed it of them, I am uncertain. But I rather incline to think, that his Theban Master taught him as well the wedge, as other forms of battalies. The cause of my conjecture is, for that I find that his fellow scholar Epaminondas beat the Macedonian horse at Mantinea in this forme. Xenophon recounteth the story to this effect: The enemy (they were the Lacedæmonians) ordered their horse like a Phalange of armed in depth, without mingling foot with them: But Epaminondas made a strong wedge of horse also (for before he tells the Theban armed were cast into a wedge) and joyned some foot with them, concealing after he had cut in pieces the horse, he should not misse of ouercomming the other forces of the enemy. And so going to charge he was not deceived of his hope. Thus Xenophon. Of joyning horse and light armed together, I have spoken before: And that they were light armed, that Epaminondas joyned to his horse, ^d Diodorus Siculus sheweth. By Xenophon then it is plain, that not only the Scythians, and Thracians, but the Græcians also, when they thought it convenient, used the horse-wedge, and that Epaminondas ordered both foot, and horse in a wedge. And considering King Philip was brought up in Epaminondas his Fathers house, and made partaker of the learning wherewith Epaminondas was instructed; it is like in erecting a new military discipline amongst the Macedonians, as he took many other things from the Græcians, so he borrowed this forme, having first seen the notable effect thereof at Mantinea.

Now Aelian bringeth reasons, why the wedge was holden better than the square. Let me with leave adde a word or two why I take it to be better than the Rhombe. And first it cannot be denied, that the wedge having the same manner of disposition that the Rhombe hath, that is a front ending in a point, where the Captaine standeth, two points of the two flanks, where the flank-commander stands, the Lieutenant in the reare, and the best men in the flanks, but it must be as powerfull to open the enemies battaile, as the Rhombe is. Then it hath this advantage of the Rhombe that it bringeth more hands to fight. For let the Rhombe and wedge be framed of an equal number, the wedge in figure resembling the forepart of the Rhombe must have the horse, that should be ranged in the reare of the Rhombe, orderly couched within the 2 sides thereof: where by both the number of the horse in the sides is increased, and the bulke of the body betwixt flank and flank enlarged. And seeing both the Rhombe and the wedge goe to the charge with the point of their front, the wedge both hath the property to pierce, and enter the enemies battaile by art, and sleight, as well as the Rhombe, and doth it with more strength, because of the great number of hands in the sides, which all come to fight. Toyme, that the hinder part of the Rhombe serveth only to avoid surprizes, and worketh nothing in charging. For after the two flank points are entered, the rest of the Rhombe growing narrower and narrower toward the Reare, fallth further off from the enemy, and is content only to follow the way, that was made to hand by the front, and flanks; without being able to strike a stroke; especially if it preserve the order it ought to keepe: whereas all parts of the wedge are effectual, the point to enter, the sides even to the flank corners,

where

where the Reare endeth, so to dispart and discover; and finally to disorder the enemy, whereby the victorie ensueth. And if we may rely upon authority, the authority of King Philip will say much for the wedge. For unless he had held it better than the Rhombe, hee would not have chosen, nor accustomed his Macedonians to it, nor Alexander after received it, if he had not bene of the same opinion. Neither did the event accesse them: for almost in all battailes their horse thus disposed carried away the victorie. But, as I before noted, neither Rhombe, nor wedge have found grace in the eyes of the great Generalls of our daies, nor can we tell what to insitt upon, till experience hath taught, how well these formes will agree with the weapons, and service of our moderne wars.

4 The Persians made choice of squares. The square is the third, and last forme of horse-battaile that Aelian mentioneth; wherof there are three kinds, one with a larger front, then flank; another with a larger flank then front; the third, with a front, and flank equal. All these three were used amongst the Persians, and Græcians. For two of the first, Xenophon may witness. When Agelilaus, after Tissaphernes (the King of Persia's Lieutenant in part of the lesser Asia) had broken truce with him, made an incursion into Phrigia, ^h Xenophon telleth, that the rest of his journey was without impediment, till he came not farre from *Dasyllium*. There when his horsemen galloped to a hill to discover the country, by chance the horsemen of *Pharnabazus* (another of the King of Persians Lieutenants) being about the same number that the Græcians were, and sent by *Pharnabazus* under the command of *Ratynus*, and *Bancaus* his bastard brother, galloped up the same hill, and discovering one the other no further off, than two parts of a furlong, at the first they stood still; the Græcians ordered Phalange-wise 4 in depth, the Barbarians making their front 12 in length, the depth many more. Afterward the Barbarians began first to charge. when they came to hands, all the Græcians that joyned, broke their stances. The Persians having *Cornel* darts killed some 12 horsemen, and 2 horses. Hereupon the Græcians fled. But when *Agelilaus* came with the Armie to the rescue, the Barbarians againe forsooke the field. The Persians then used a square longer in flank, then front: The Græcians a square longer in front, then flank. But which of the three squares is most to be esteemed Aelian sheweth in the words following, saying these squares are best, that

5 Double the number of the length, to the number of the depth. What the length, and depth in a battaile are, we have scene before. To understand Aelian the better, let us repeat, that the length of a battaile is the extension of the front; the depth the extension of the flank. To double then the number of the length to the number of the depth, is to place wise so many men in front, as in flank. As for the purpose, 6 in front, 3 in flank; or 8 in front, 4 in flank; or 10 in front, 5 in flank. And that this was the manner of the Lacedæmonians appeareth by the *Oulamos*, or horse-troope instituted by *Lycurgus*, which was figured Tetragonally with a equal sides, and contained in it 50 horse. Now that it could not be a square of number, that is, to have as many horse in flank, as in front may hereby be shewed, because no square number will make 50. The nearest is 7 times 7, which amounts to 49. But proportioning the number of the length double to the number of the depth, that is 10 in front, and 5 in flank, even 50 will arise. So that the horse troope of the Lacedæmonians had the number of the length double to the number of the depth, and made a square in the equality of measure of the sides, not in number, which is the Tetragonal figure, wherof *Plutarch* speaketh. And where Xenophon (as I have alledged before) reporteth that the horsemen of *Agelilaus* were but 4 in depth, it hindereth not this truth. For, as I noted before, the ordinary array of the Lacedæmonians foot was 8 in depth. Yet did *Pausanias* the Lacedæmonian

King

b Diodor. Sic.
lib. 16. c. 17.
c Xenoph. Hist.
Graec. lib. 7.
c. 46. l.

d Dio I. Sicul.
lib 15 pag 102

^h Xenoph. Hist.
Graec. lib. 1.
c. 48. D.

ⁱ Plutarchin
Lycurgo.

The Tactics

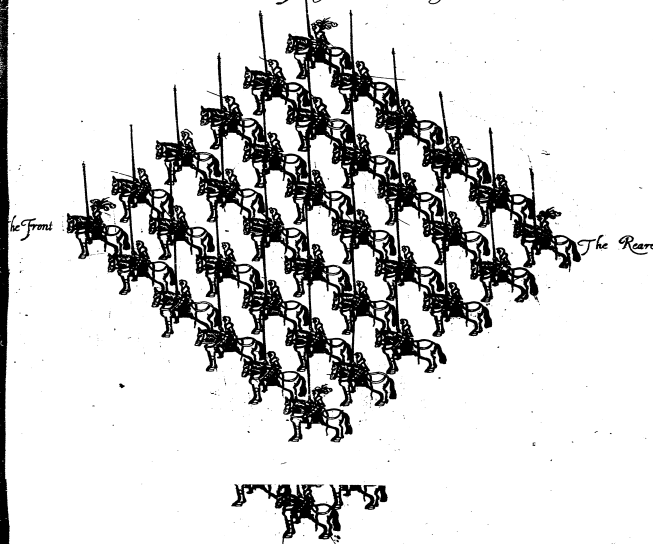
King cast his men into a deepe Phalange against Thraſibulus. Other examples I haue al-
 ledged in the ſame place touching the ſame matter. Beſides this appeareth to be but a cu-
 muluous fight either of the parties comming ſuddenly in the fight of the other, and
 going preſently to charge, before they could haue time to alter the order they then were in.
 And ſo ſay the horſe troupe of the Lacedemonians ought to haue bene but 4 in depth,
 it muſt thereof neceſſarily follow that they were 12 in length, which yet will com: (horſe of
 50: 4 times 12 makes but 48. Indeed ^k Leo holdeth opinion, that in a horſe battaile, the
 depth ought to be no more than 4. I will ſet downe his words as neare, as conveniently I
 can enliſh them. The depth, ſaith he, or thickneſſe, as it was of ancient time limi-
 ted, is ſufficient, if it be of 4 horſe in euery troupe; becauſe in horſe a greater
 depth will be idle, and to no purpoſe. For they cannot, as foote doe with their
 thickneſſe, thruſt one another forward from behind; and ſo the formost, will they,
 or nill they, are forced to goe againſt the enemy. And this is done amongſt foote.
 But the horſe can not thruſt forward thoſe, that are before them, nor the file-leaders
 that ſtand in front, be ſeconded in that kinde by the reſt, that ſtand in depth after
 the fourth man. For if they be *Lancers*, the fiſt ranke cannot reach with their
 launces to the front. If *Archers*, they ſhall be faine to ſhoot aloſt for feare of
 hurting their companions before; and ſo their arrowes ſerue for no vſe, after fight
 is ioyned. Therefore is the number of 4 ſufficient in depth, as I haue ſaid. This was
 the opinion of Leo. To which I cannot abſolutely aſſent; vniſſe he had giuen 8 for the
 front of his troupe, and ſo made it of 4 equall ſides in figure not in number, as *Ælian*
 requirith to be done in the beſt ſquares. For the reaſon of launces not reaching to the
 front in the fiſt ranke, reacheth not home to the reaſon of warre. *Ælian* before hath de-
 clared, that the pikes of the ſeuenth ranke reach not to the front of the Phalange. Yet
 no man will thereof inferre, that the Phalange ought to be but 6 deepe. Yea but the foote
 that come after, helpe the formost, ſeconding them, and thruſting them on with the weight
 of their bodies, which the horſe can not doe. This muſt be granted to be an advantage, that
 foote haue aboue horſe in depth. Yet are there other reaſons alſo of giuing depth to a Pha-
 lange: In the order whereof two conſiderations concur; one of offence, the other of de-
 fence. The reaching of pikes or horſemen ſlaues ouer the front is good for offence, that is
 to annoy the enemy in the flanke: likewiſe the thruſting on of thoſe that come behind, ſer-
 ueth with the violence to make them giue ground. A reaſonable depth is for defence, in as
 much as it defendeth a Phalange againſt the induerſe of the enemy to breake it a ſunder.
 And as it is a fault to make it too deepe, ſo is it likewiſe a fault to make it too ſhalow.
 Too much depth narroweth the front, and giueth eaſie meanes to the enemy to incompaſſe, and
 ouer-front it. Too much ſhalowneſſe on the contrary ſide maketh it weak, and ready to
 be broken, and diſſected by the enemy, and giueth a paſſage thorough, and meanes not
 onely to incompaſſe the front, but at the ſame inſtant alſo to aſſault it behind, and ſo utterly
 to deſeat it. So that the reaſons of Leo reach not home, as I ſaid, there being other cauſes
 of thickning a horſe troupe beſides reaching of launces to the front, and ioint thruſ-
 ting on of the horſe comming behinde. And where Leo ſpeaketh but of 4 horſe in
 depth of a troupe, Polybius ſaith plainly that being ordered for fight, they had for the
 moſt part 8 in depth; Polybius a man which liued in the times, whereof Leo ſpeaketh,
 and had bene Generall of the horſe of the Achæans. Beſides Leo ſeemeth not a little to
 differ from himſelfe. For in his ſeuenth Chapter, he writeth after this manner: If
 there be many horſe (that is about twelue thouſand) let the depth be of 10. If
 but few, let it be no more than 5. In ſquares therefore I hold *Ælians* proportion beſt,
 to double the number of the front, to the number of the flanke; and as the number of the
 troupe ariſeth (for horſe troups are not alwaies of one number) to enlarge the length of
 the

^k Leo cap. 13.
 § 40.

^l Leo cap. 14.
 § 108. 109.

^m Leo cap. 7.
 § 31. & cap. 14.
 § 70.

Cap. 13
 A Rhombe ſileng but not ranking



⁵ The halfe Rhombe is called a wedge being fashioned three ſquare; ſo that the
 forme thereof appeareth in the Rhombe.

Other haue formed the Rhombe ſo, that the 4 Horſemen embattailed in that
 forme, nei-her file, nor ranke, conceiuing that turnings and other motions will be
 more eaſily performed in this figure, nothing hindring before, behind, or in
 flanke. And fiſt they place the Leader; then one at his right, and another at his
 left hand, ſo diſtant, that their Horſes heads reach vp to his Horſes ſhoulders, as
 is

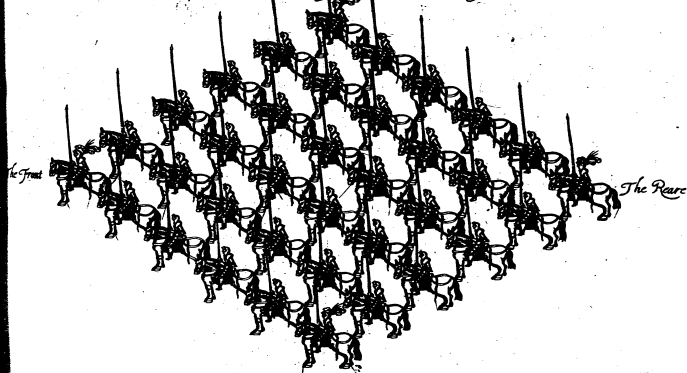
1 Leo esp. 14.
5. 102. 109.

Leo cop. 7.
581. 2. cop. 14.
970.

...neyn narroweth the front, and giueth easie meanes to the enemy to incompasse, and
ouer front it. 1 Too much shallownesse on the contrary side maketh it weake, and ready to
be broken, and disordered by the enemy, and giueth a passage thorough, and meanes not
only to incompasse the front, but as the same instant also to assault it behind, and so utterly
to defeat it. So that the reasons of Leo reach not home, as I said, there being other causes
of thickning a horse troupe besides reaching of Launces to the front, and ioint thrusting
on of the horse coming behind. And where Leo speaketh but of a horse in
depth of a troupe, Polybius saith plainly that being ordered for fight, they had for the
most part 8 in depth; Polybius a man which liued in the times, whereof Leo speaketh,
and had bene General of the horse of the Achæans. Besides Leo seemeth not a little to
differ from himselfe. For in his sixteenth Chapter, he writteth after this manner: If
there be many horse (that is aboue twelue thousand) let the depth be of 10. If
but few, let it be no more than 5. In squares therefore I hold Elians proportion best,
to double the number of the front, to the number of the flanke; and as the number of the
troupe ariseth (for horse troupes are not alwaies of one number) to enlarge the length of
the

A Rhomb

Cap. 19
A Rhombe neither ~~file~~ nor Ranking



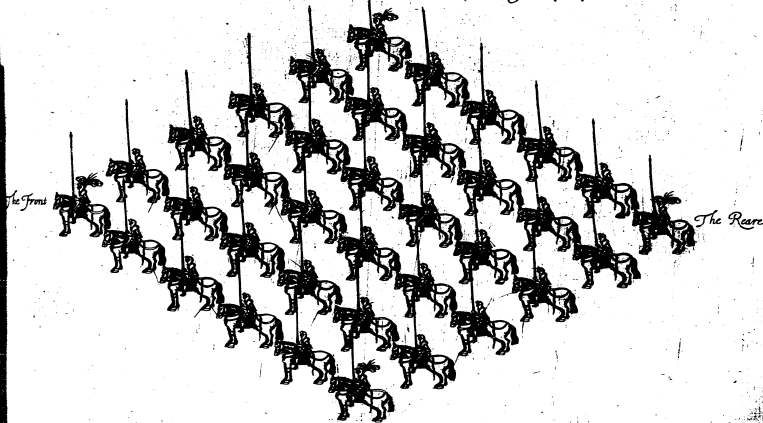
3 The halfe Rhombe is called a wedge being fashioned three square; so that the
forme thereof appeareth in the Rhombe.

Other haue formed the Rhombe so, that the 4 Horsemen embattailed in that
forme, neither file, nor ranke, conceiuing that turnings and other motions will be
more easily performed in this figure, nothing hindering before, behind, or in
flanke. And first they place the Leader; then one at his right, and another at his
left hand, so distant, that their Horses heads reach vp to his Horses shoulders, as

most part & in *capit*; Polybius a man which lived in the times, whereof Leo speaketh, and had bene General of the horse of the Achazans. Besides Leo scemeth not a little to differ from himselfe. For in his seventh Chapter, he writeth after this manner: If there be many horse (that is about twelue thousand) let the depth be of 10. If but few, let it be no more than 5. In squares therefore I hold Elians proportion best, to double the number of the front, to the number of the flanke; and as the number of the troupe ariseth (for horse troupes are not alwaies of one number) to enlarge the length of the

Leo cap 7.
§ 81. & cap 14.
§ 70.

Cap. 19.
A Rhomb Ranking but not Filing



They that would haue a Rhomb Ranking must haue the greatest number being the middlemost of an vneuen number, as of 11, or 13, or 15. To which they ioine other ranks before, and behind, euery one conteyning two lesse than the former; as if the greatest rank consist of 15, the next ranks on either side are to haue but 13, the next on either side of these 11. and so euery one two lesse, till at last you come to 1. And the whole Troope is to consist of 113 horse.

³ The halfe Rhombe is called a wedge being fashioned three square; so that the forme thereof appeareth in the Rhombe.

Other haue formed the Rhombe so, that the 4 Horsemen embattailed in that forme, neither file, nor rank, conceiuing that turnings and other motions will be more easily performed in this figure, nothing hindring before, behind, or in flanke. And first they place the Leader; then one at his right, and another at his left hand, so distant, that their Horses heads reach vp to his Horses shoulders, as

the front, and the depth of the flanke proportionably one to an other.

6 When there are as many horse in length as in depth I noted before in the ninth Chapter, that there were two squares of equal sides, the one of number, the other of figure; which two squares differ in this, that the one maketh unequal sides in the shape of the battaile, the other equal. The first at this day, we call a square of men, the other a square of ground. When the number of the sides is equal in length, and depth, it giueth but halfe so much ground in front, as in flanke. Each souldier, if it be a foote-battaile, occupying a foote, and a halfe of ground in front, when he goeth to charge, where in flanke he must haue 3 foote. And in a horse troupe 3 foote in front, and double, or (as some say) treble as much in flanke. And so are the sides unequal. The euen length of flanke and front giueth a like ground to both, and maketh the sides of the figure equal, but the number of the front double to the number of the flanke, whether it be in horse or foote. In foote, because the souldiers in ranke haue but halfe so much distance, as they haue in file; in ranke a foote and a halfe, in file three foote. In horse, because the length of the horse is much more, than his breadth, and that length is fully stretched out in flanke, the breadth only in front.

Why Rhombes were first brought into use, and the diuers formes of them.

CHAP. XIX.

THE forme of the Rhombe seemeth to haue beene taken vp for the necessarie vse thereof. For the Captaine possessing the first place, the next following Horsemen are not to ranke with him, but to come a litle after on both sides: so that the heads of their Horses may reach to his horse shoulders, & on the right, & left hand, and behind, they ought to keepe good distances that too much thronging and clustering together, breed not disorder, whilest some horses being by nature sullen fall a stinging oftentimes, and foule with other; and considering the beast is somewhat long of body, that in turning about he wound not the horsemen, that are in fight, whilest with his heeles he ay meth at the Horses next vnto him.

They that fashion Horse into Rhombes, so fashion them, that some Rhombes file, and ranke; some neither file, nor ranke; other some file, but ranke not; other ranke, but file not: euery particular whereof standeth thus.

They that would haue a Rhombe both file and ranke make the greatest ranke being the middlemost of an vneuen number, as of 11, or 13, or 15. To which they ioyne other ranks before, and behind, euery one conteyning two lesse than the former; as if the greatest ranke consist of 15, the next ranks on either side are to haue but 13, the next on either side of these 11. and so euery one two lesse, till at last you come to 1. And the whole Troupe is to consist of 113 horse.

The halfe Rhombe is called a wedge being fashioned three square; so that the forme thereof appeareth in the Rhombe.

Other haue formed the Rhombe so, that the Horsemen embattailed in that forme, nei-ther file, nor ranke, conceiuing that turnings and other motions will be more easily performed in this figure, nothing hindering before, behind, or in flanke. And first they place the Leader; then one at his right, and another at his left hand, so distant, that their Horses heads reach vp to his Horses shoulders, as

most part 8 in depth; Polybius a man which liued in the times, whereof Leo speaketh, and had beene Generall of the horse of the Achæans. Besides Leo seemeth not a litle to differ from himselfe. For in his seventh Chapter, he writeth after this manner: If there be many horse (that is about twelue thousand) let the depth be of 10. If but few, let it be no more than 5. In squares therefore I hold Ælians proportion best, to double the number of the front, to the number of the flanke; and as the number of the troupe ariseth (for horse troupes are not alwaies of one number) to enlarge the length of the

is said before. And the first row they make of an vneuen number (as 11). The Leader of the Troope standing in the midst, and 5 other being laid to him backwardly on either side; so that this Rank containeth two sides of the Rhombe. Then the Reare-Commander is placed directly behind the Leader, and to him are other ioyned forwardly on either side, and the number of euery following ranke after the first, is to be two less than the former, and therefore 4 must be added on either side to the Reare-Commander, and the number of the second ranke be 9. This Rank maketh two sides Parallel to the two former sides of the Rhombe. The third must be 7, and so forward to one. The whole Troope hath in it 35 Horse. Polybius expresseth the forme by the Greeke letter Δ . and maketh it to consist of 64 men.

Other Rhombes there are which 6 file, but ranke not, and are fashioned thus: They make a file of any number, the Captaine being File-leader, and the Reare-Commander the last of the file. To both the flanks of this file, they lay two other files, either of them one lesse in number, than the first. These they begin to place, euen with the midst of the distances of the first file on both sides, as if there were 10 in the first file, the next files on either side should haue 9 a peece, and the next after them 8 a peece, and still one lesse in all the rest after comming files, and so it will fall out, that the Horsemen shall file, but not ranke. This forme is profitable for turning off faces, when need is, from one point of the Rhombe to another. 7 Turning to the right hand is called turning to the staffe. Turning to the left hand is called turning to the Raines. But if a Troope be 8 to ranke, and not to file, it must be ordered thus: The middle and greatest ranke is to be made of an vneuen number, and the rest of the rankes on both sides, laid euen with the distances of this ranke, as was done in the filing troope. So shall you haue a Troope that ranketh, but fileth not.

Notes.

THE former Chapter had a generall diuision of Horse battailes into Rhombes, wedges, and squares; this comprehends the sagd figures of Rhombes, and the manner of framing them. Rhombes therefore are of 4 kinde, some filing, and ranking; some filing, not ranking; some ranking, not filing; some neither filing, nor ranking.

1 The heads of the horses reach to the heades of his shoulders] *Alian saith, that in a Rhombe the Captaine standeth first, and the heads of the next horse reach to his horse shoulders. This rule, if it be taken generally, and meant of all Rhombes, will deceiue vs; if for two kinde of Rhombes alone, there is nothing more true. The Rhombe neither filing, nor ranking, and the Rhombe filing, not ranking, haue the followers horses heads advanced to the shoulders of them, that stand before. But the Rhombe filing, and ranking, as the other ranking not filing, come wholly behind the horse of the Captaine, as the figure shewes, and will appeare in the verbal description of the Rhombe.*

2 A Rhombe both to file and ranke] *To make a Rhombe both file and ranke, choicemust first be had of an vneuen number for the ranke the midst of the Troope, where the manner is to begin the Rhombe; which number must neither be too great, lest the Troope grow also too great, nor too little, lest there be in it no strength. Alian giues a 11, 13, or 15 for that ranke, and willett vs to begin the frame by placing first the middle ranke, to which the other rankes are to be ioyned on both sides, the middle againe*

again; the middle man of the first ranke in a right line of file, and the rest in like sort, euery Ranke still decreasing 2 men, till at last in the front, and reare-angle you come to one. The figure of this kinde of Rhombe I haue placed in the precedent Chapter; wherein the middle ranke is of 11, and the whole troupe of 61, and the horse heads of thole that follow reach not to the former horses shoulders.

3 The halfe Rhombe is called a wedge] *I haue spoken of wedges before, but noting of the framing of them. Alian here sheweth how they are framed, when he saith, that the forme of them appereth in the Rhombe, and that the haife Rhombe is a wedge. For as in a Rhombe filing, and ranking, you begin with placing the middle ranke first, and so proceed adding on both sides ranke to ranke, till you come to one man in the front: So must you proceede in a wedge, sauing that to the first, and greatest ranke, you ioyne the rest only on the one side, abating still in euery ranke 2 men, till you come to the point of the front, where the Captaine standeth alone. And thus was the ordinarie horse troupe amongst the Macedonians, and is described in the next Chapter.*

4 That the Horsemen neither file nor ranke] *The second kinde of Rhombe specified here by Alian is directly opposite to the first. The first both filed, and ranked, this neither fileth, nor ranketh; and is that kinde, which I noted in the last Chapter, to haue more curiositie, than este. For the rest, what is more easie to frame, than they? In which either files, or rankes are laid together; or files alone, or ranks alone. And out of that issuing both in the inward parts of the Rhombe, and the outward (that is the flanks) arise, and are without difficulty figured. In this you must first begin with the out sides, and make two front lines, or sides of the Rhombe; and after adde as many to the Rear. And then when the 4 sides are framed, and haue their place, patch up by peece-meale thereof the body within. Wherein if there be not very large distances left betwixt horse, and horse, especially euery one being laid head to shoulder to another, it is not possible to conuey so many horses within the sours sides, as will make up the full Rhombe. And yet make it up as you will, the trouble is more, than in the rest of the Rhombes. And for the use, I see not how it can be greater, than in the rest, without power is alledged for turning, and other motions. And the more I thinke upon it, the more I am induc'd to thinke, that it was the invention of some Tacticske master (of whom were great plenty amongst the Grecians) who seeing that some Rhombes filed, and ranked not; other ranked, but filed not; other both ranked, and filed, and that the two first were opposite the one against the other, would needs bring in a fourth, neither filing, nor ranking, to make an opposition betwixt against the third. But because this kinde also is specified by Alian, let vs see how it is to be framed. Alian for examples sake would haue the Troope to consist of 36 horse. To put these 36 horse in a forme, that shall neither file nor ranke, we are thus to worke. First, we must begin with the two front sides of the Rhombe, and make them of 11 horse, placing them thus: The Leader and Captaine in the point; next him backwardly on each side a horseman, his horse head reaching to the shoulders of the Captaines horse; then on the outward side of each of these a Horseman, and their horses heads must likewise reach to the shoulders of the next horses before. So must you goe on, till you haue in like manner bestowed 2 a peece more on each side, still opening the two sides of the Rhombe proportionally. Thus done you haue*

Then are we to fashion the two Reare sides of the two sides of the Rhombe which Rhombe of 9 horse, placing them after this will be in this forme. The Lieutenant in the Reare angle, directly opposite to, & yet looking toward the Captaine; on either side of him forward toward the front 2 Horsemen, their horses shoulders lying euen with the head of the Lieutenants horse. And after them the other 6; 3 on one side, and 3 on the other in the same proportion. And so haue we the other two sides of the Rhombe in this forme, which being

The Tactics

igned to the former make the 4 sides of the Rhombe; in the framing whereof 20 of the 36 horse are bestowed. There remains 16, which are thus to be ordered: Within the Rhombe we must at reasonable distance place a horseman behind the Captaine in aright line, and in the manner as before lay 3 to him on each side. The number will amount to 7, and this is the figure. Then another horseman is to be set at the same distance directly before the Lieutenant, and on each side of him two other toward the front. And these 12 horse joined together will be 5 in all, and in this form. They will fashion out a lesser Rhombe, comprehended within the sides of the first. So are 32 horse disposed of. The 4 that are left are thus to be ordered. In a right line againe after the Captaine, and at the former distance is another horseman to be set: Then 2, one of the one side, & the other of the other side of him, their horses heads reaching to his horses shoulder: thus the horseman left must supply the void place, standing directly before him, that stood next before the Lieutenant. And this is the true description of the Troope neither filing, nor ranking. I have beene the longer in describing it, because the figure drawn is not fully to my minde, no horse head reaching to the shoulders of the horse, that standeth before him.

5 Polybius maketh it to consist of 64 men. Alian took the number of 36 horse to frame this Rhombe, Polybius requirith 64. The number is not materiall, so the forme be observed. If you make it of 64, you are to take 15 horse for the 2 front sides, and 13 for the 2 reare sides, and so in every ranke within to diminish 2, as you did in the former.

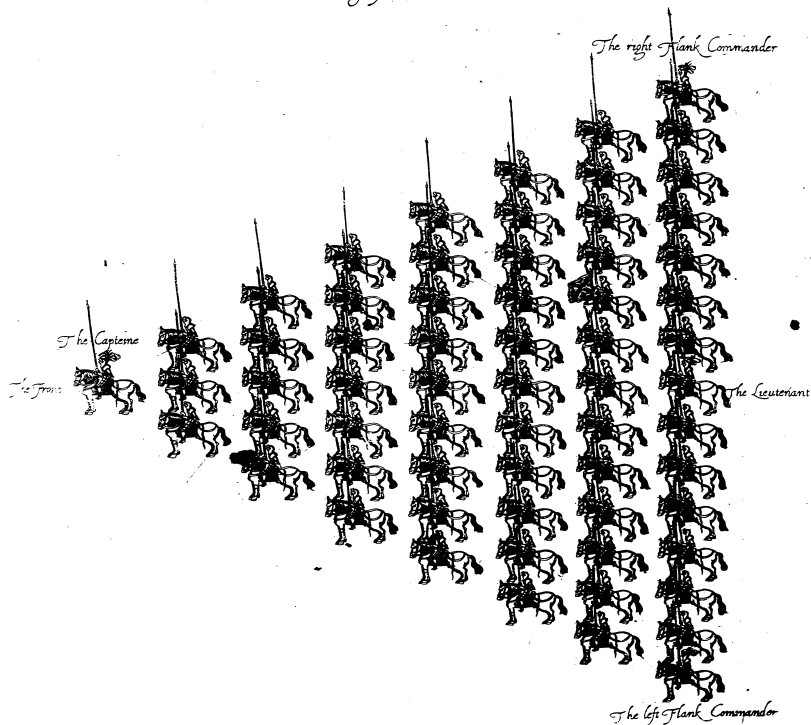
6 Which file, but ranke not. The third kinde of Rhombe fileth, but ranketh not. It is easie to frame. Take what number of horse you please, and make a file, then lay to the distances betwixt horse, and horse of that file on each flanke two other files, each file conveying one lesse in number than the first. And the head of the files are to be laid right against the space which is betwixt the Captaine, and his follower, and the rest of the horses against the other spaces successively. In all the paires of files, that follow, and are laid to the flanks, you must still diminish a horse a peece, till you come to the points, which have but one either of them. And of this abatement of one in every file, both front, and reare, and flanks grow into points, and make a Rhombe: As if the even number in every file, a square battaile would arise. See the figure. This was the forme the Thessalians sought in, as appeareth by Alian.

7 Turning to the right hand. The turnings of horsemen and footmen to the right, and left hand, are not termed by the same names. And the difference cometh of the diversitie of weapons carried on the right, or left side. The horseman in his right hand hold his pike, in the left the raines of his bridle. The armed foote in his right hand his pike, on the left shoulder his Target. Hence was it, that when the horseman was commanded to turne to the right hand, they bid him turne to his pike, the footman to his pike. When to the left hand, they bid the horseman turne to the Raines, the footman to the Target.

8 To ranke, and not to file. This is the last kinde of Rhombe, and it ranketh, but fileth not. It is made by a contrary way to the former. The filing Rhombe began at the front point, & reare point, & proceeded to the flanks. This beginneth at the flanke points, & proceedeth to the front and reare. First therefore a ranke is to be laid of what number you list. Alian would have it of an uneven number; but it will fall out as well in an even number, as the figure sheweth. To the distances of this ranke you must lay 2 ranks more, one on either side, whose number must be one lesse a peece, than the former ranke. Thus continue laying ranks fill toward the front, and reare, and in every paire of ranks diminish one a peece, till you come to the points, either of which have but one, namely the Captaine, & the Lieutenant, and the Rhombe will ranke, and not file.

CHAP. XX.

The ordinary horse trolope
consisting of 64.



The place of Horsemen in the field, the number of an usual horse troupe, the degrees, and names of the officers of the Horse in general.

CHAP. XX.

TH² Troopes of Horse, as the light-armed, are placed sometime before the *Phalange*, sometime on the right, or left hand in *flanks* of the *Phalange*, sometime behind the light-armed in the *Reare*. For our purpose, let them be placed in the *Reare*, and let the first Troope be of 64 men, and the first ranke thereof 15 Horse. The next 13. The next 11; and in all the rest abate 2, till you come to the last, which is one.

² He shall carry the *Coronet*, that standeth in the second ranke next the *Ranke-Commander* on the left hand. All the Troopes shall be 64 in number. The horsemen in all 4096. ³ Two Troopes are called an *Epitarchy* of 128 horse. The horsemen in all 4096. ⁴ A *Tarentinarchy* of 256 horse. Two *Tarentinarchies* an *Hipparchy* of 512. Two *Hipparchies* an *Ephipparchy* of 1024 horse. Two *Ephipparchies* a *Telos* of 2048 horse. Two *Telos* make an *Epitagma* of 4096 horse.

Notes.

Hliberto of squares and Rhombes, usual horse battailes amongst the Græcians. Now followeth the horse battaile of the Macedonians, of which *Ælian* hath thus afterward: This forme of horse battaile is called a *wedge* by *Tacticks*, and it was invented by *Philip* King of Macedonia, who placed his best men before, that by them the weaker might be held in, and inabled to the charge. As in a *spear*, or sword, the point whereof by reason of sharpnes quickly piercing maketh way for, and letteth in the middle blunt yron. I have spoken somewhat of the wedge in the two last Chapters. *Ælian* in this Chapter sheweth the number, and manner of framing it, and how many troupes ought to attend the *Phalange*, and under what officers, and degrees.

¹ Let the first troupe be of 64 men] The number of the wedge ought to be 64 horse. You make it beginning (as the Rhombe thus ranked, but filed not) with a ranke of 15 horse. Then must you proceed toward the front, with an other ranke of 13; the middle man filing with the middle man of the first ranke, and the rest with the rest. And so you are to continue abating still two in every following ranke, till at last you come to one, who is the *Commander* of the Troupe, and standeth in the point of the front.

² He shall carry the *Coronet*] The place of the *Coronet* is not right set downe in the figure. He there standeth on the right hand of the middle man of the second ranke, whereas he should stand on the left. And you must not account the second ranke to be the ranke next to the *Commander* in the front; but as *Ælian* doth, that was secondly placed after the first consisting of 15, which was in the *Reare*. So that the *Coronet* is to stand in the next ranke to the *Reare*.

But here is nothing said concerning the distances, that ought to be betwixt horse, and horse. Of the distances betwixt foote, and foote he hath spoken in the 11 Chap. But of the distances betwixt horse, I finde nothing, but generall words. Thus which wanteth in *Ælian*, I will supply out of other Authors. We must understand then, that two kinds of distances were observed amongst horsemen; one for marching, an other for fight.

In marching there ought to be 6 foute betwixt horse and horse. *Ælian* hath before given this distance to the foute. And that horse held it likewise appeareth by Polybius. Who reprehending Calisthenes for carelesse in describing the battaile betwixt Alexander and Darius at Issos, specially taxeth this: That he placed thirty thousand horse, and thirty thousand mercenaries, in foureteen furlongs of length, whereas the place was not capable of halfe the horse. His words haue this sense; The order of horse, when they are prepared for fight, is for the most part 8 in depth. And there is a distance to be left in front betwixt euery troupe, to giue liberty to wheele and double-wheele. So that one furlong will containe 800 horse; and 10 furlongs 8000; 4 furlongs 3200: And eleuen thousand, and two hundred horse will fill the space of 14 furlongs in length. The words seeme at first somewhat obscure, being well weighed they will be cleare enough. Polybius saith, that these 800 horse were ordered 8 in depth, and that they took up a furlong of ground in length. There must be therefore of them a hundred files. For a hundred files of 8 horse a peece, will arise to 800 horse. Compare then these 100 files, (the length of the battaile) to the length of a furlong. And seeing a furlong containeth 400 Cubits, or fix hundred foute, euery file shall haue 4 cubits, or 6 foute space betwixt them. And so the distance betwixt file and file in a march will be 4 Cubits, or 6 foute. The other distance of three foute appeareth in *Leo*, whose words stand thus: Put the case, that the battaile is of 600 horse in length, and 300 in depth, seeing that euery horse in length of the battaile possesseth three foute in breadth, the number of foute will amount to 1800; And seeing againe that euery horse in depth possesseth 8 foute, there will arise hereof 4000 foute; so that in the foure-sided figure, out of the length of 1800, and the depth of 4000 foute arise 720 Myriades of square foute. And the Perimeter alone of the outward foure sides containeth 11600 foute. And because 6 foute make a fathome, and 100 fathoms make a furlong, and 7 furlongs, and a halfe, make a mile, the whole Perimeter of 11600 foute will come to two mile, and a halfe, and neare a 10th part. In this distance therefore according to the closest order, or shutting, the thirty thousand horse are contained. But if they stand not so close, you must alter your account according to the thinnesse, and out of the greatness of place coniecture of the multitude of the people. So *Leo*. Which place albeit it seeme to require a large interpretation, because many things worth noting offer themselves in it; yet for this time I will only insist upon that, which I first propounded, that is the distance of three foute betwixt horse, and horse, when they goe to charge (for that is the meaning of *Leo*, when he speaketh of the closest order) which distance is expressly here set downe. And the matter will yet seeme more cleare, if we adde the words of *Leo* in the Paragraph next, but one, to this, which are these: The oldest Tactics in ordering of foute Battailes giue euery man at the first distance foure Cubits; when the battaile is closed two Cubits; when ferred and shut one Cubit. Out of which proportion a Scout may exactly discover by the quantitie of the place the number, not onely of horse, but of foute also. These oldest Tactics that *Leo* mentioneth agree with *Ælian*, as wee haue seene. But where the foute haue three distances, the horse are to haue but two. The open order of six foute they ought to haue, and likewise that of three foute; neerer they cannot come together, because of the breadth of their horse, and because they are to haue room sufficient for the wielding of their weapons.

All the Troupes are to be in number 64. A Troupe consists of 64 men, and so the Phalange belong 64 Troupes, as the Phalange containeth 64 Ensignes, or *Synagmas*.

a Polyb. lib. 12.
663. A.

o Leo cap. 17.
§ 99.

tagma's of armed foute. To which Ensignes the 64 Troupes of horse are proportioned. Their place is according to *Ælian* after the light-armed; not one troupe after, or behind another, but one beside another, in one front; and that from in a right line, which stretcheth out, as long as the Phalange of armed it selfe. Now the files of the armed being 1024 in number, and the number of the horse in the last ranke (which containeth the length of the horse-battaile, and should answer the number of files) but 960, we must seek out a proportion to make the length of both equal one to another. The difference then betwixt them in length is 64 men, which in order take up 192 foute. And where there goe foure Phalangarchies to a fourfold Phalange, and 16 troupes of horse are placed behind euery Phalangarchie, we must diuide these 192 foute into foure parts; euery of which parts will amount to 48 foute, and giue to each troupe three foute distance one betwixt another (for distances betwixt one troupe, and another, Polybius holdeth necessary) and so shall the 16 troupes of horse take up as much ground in length as a Phalangarchie. The one containing 256 files in length which occupy 768 foute of ground; and the other 240 men in the last ranke, which occupy 720 foute. To which adding 48 foute of distance, there ariseth the euen number of 768. And so shall the 64 troupes of horse be euen in length with the fourfold Phalange.

The names of the Offices, and Commands of the Horse follow, wherein as I before noted in the foute, we must not presse too neare the propriety of words, but take them, as they haue beene used among Souldiers.

3 Two troupes are called an Epilarchie. One troupe is called Ile, and the Commander an Ilarch; for so he is termed before in *Ælian*. Two troupes an Epilarchie, and the Commander an Epilarch, as it were a Commander ouer two Iles, troupes. He hath 128 Horse vnder his command. o Cap. 18.

4 A Tarentinarchie. Of Tarentines mention is made in the second Chapter. The name of a Tarentinarchie is not giuen to this Troupe, because it consisted of Tarentines, but because of likelihood the Tarentine horsemen had so many in strength, *Leo* is he, as it will, is signifieth here a troupe of 256 Horse.

5 An Hipparchie. Properly signifieth the command of horse; and Xenophon useth the word Hipparch for the Generall of horse; but *Ælian* and the Tactics use it for the command of 512 horse.

6 An Ephipparchie. As it were a command ouer two Hipparchies, or ouer 1024 horse.

7 A Telos. The name of Telos is giuen both to a body of horse, and to a body of foute. A Merarchie was called by some Telos (saith *Ælian* before) and contained 2048 armed. The Telos of horse containeth 2048 horse. So the bodies are equal in number. The word sometimes signifieth a Command, or Dignitie, from which signification this body, as I semeth, hath the name.

8 Epitagma. The whole body of light-armed was called an Epitagma, which name is giuen likewise to the whole body of horse comprizing 4096 horse. It maye they are both so called, because they are placed behind the Armed, as I need before. For that place *Ælian* assigneth vnto them.

The diligence to be used in choice, and exercise of the best formes of Battails.

CHAP. XXI.

THese Inventions and conceits of those, that lived in old time, about *Troopes of Horse* are declared, in what forme every one was cast, and for what cause forme vied one forme, some another. Now it behoueth (as in things that carry with them great difference) not carelessly, and negligently, to rely vpon the bare precepts; but rather by daily exercise to make tryall of every kind of figure, and so attayning to the perfect knowledge of that, which is readiest, and of most advantage, to admit and receive it in true fight. For it were great simplicitie, considering in matters of lesse importance men by curious inquiry reach to the exact finding out of many things, herein not to ground vpon perfect and sure experience, before we come to ioyne with the enemy.

Troopes may be enlarged or lessened, as it shall seeme convenient to him, that hath the command.

Of Chariots; the names, and degrees of the Commanders.

CHAP. XXII.

As for ordering *Chariots* and *Elephants*, albeit they are worn out of vse, yet to make vp the measure of this discourse, I will remember their names, as they are set downe in ancient writers. In the Art of ordering *Chariots* for the field, they call two *Chariots* a *Zygarchie*; Two *Zygarchies* a *Zyzygie*; Two *Zyzygies* an *Epyzyzygie*; Two *Epyzyzygies* an *Hartamarchie*; Two *Hartamarchies* two wings; Two wings a *Phalange*.

A man may vse many and sundry *Phalanges* of *Chariots*, and yet retain the same names in every *Phalange*. Some haue framed simple *Chariots* to serue with all; other some haue armed them with *Sikes* prominent and standing out on each side.

Notes.

There were two kinde of *Chariots* used of ancient time, the one a simple *Chariot*, the other a *Chariot* armed with *Sikes*. The first kinde was used by the *Heroes* (as they terme them, that is the renowned *Souldiers* of old, such as were *Achilles*, *Hector*, *Cynus*, *Encas*, *Tumus*) as appeareth by *Homer*, *Virgil*, *Ovid*, and other *Poets*. The last was brought in by the *Generalls* of later times, especially by those that reigned in *Asia*, and in *Africa*. For the *Europeans* haue counted them fruitlesse, and vaine mockeries, and amongst them you shall hardly finde any mention of *Chariots*. *Ælian* toucheth them onely, because both they, and *Elephants* were in his time growne out of vse. Therefore I meane likewise to passe them over slightly, onely directing the Reader, that is desirous to understand their manner of fight to places of *Historie*, where they are mentioned. And first see for their

Forme.

Forme. *Xenoph. Cyrop. lib. 6. 152. D. E. & 156. B. C. de exped. Cyr. lib. 1. 264. A. B. Liu. decad. 4. lib. 7. 142. A. Diodor. Sicul. lib. 17. 596. Quin. Curt. lib. 4. 119 & lib. 8. 371.*

Their violence, *Diod. Sicul. lib. 17. 593.*

Their place in the battail, *Xenoph. Cyrop. lib. 6. 168. C. D. Liu. decad. 4. lib. 7. 142. A. Diod. Sicul. lib. 14. 408.*

Remedies against them, *Diodor. Sicul. lib. 17. 592. 593. Xenoph. de exped. Cyr. lib. 1. 265. Liu. decad. 4. 142. Quint. Curt. lib. 4. 141. Plutarch. in Sylla.*

I come to the names of the Commanders of Chariots.

1 A *Zygarchie*] The command of two *Chariots*; as it were a yoke of *Chariots*.

2 A *Zyzygie*] The command over two yokes, as it were, of *Chariots* ioynd together; that is ouer 4 *Chariots*.

3 An *Epyzyzygie*] The command ouer foure yokes of *Chariots*, that is ouer eight *Chariots*.

4 An *Hartamarchie*] Properly the command of *Chariots*. But used by *Ælian* for the command of 16 *Chariots*.

5 A wing] As soote, so *Chariots*, and *Elephants*, had their wings of battail. To the wing went 32 *Chariots*. Yet finde I this order of imballailing *Chariots* nowhere, but in *Ælian*. He that will, let him read the places, that I haue noted before, for the ordering of *Chariots*. Notwithstanding I can not doubt, that the names giuen here by *Ælian*, are taken out of ancient writers.

6 A *Phalange*] It consisteth of 64 *Chariots*; and wee here see, that *Chariots* also had their *Phalanges*, as well as soote, and *Horse*.

Of Elephants; the names, and degrees of their Commanders.

CHAP. XXIII.

Touching *Elephants*, he that is Commander of one *Elephant* is called a *Zourchos*; Of two a *Therarcha*, and the body a *Therarchy*; Of foure a *Epitherarcha*, and the body an *Epitherarchy*; Of eight a *Hartha*, and the body an *Harchy*; Of 16 a *Elephantarcha*, and the body an *Elephantarchy*; Of 32 a *Keratacha*, and the body a *Keratachy*. That which consisteth of 64 wee call a *Phalange* of *Elephants*, as if a man should name the Commander of both the wings a *Phalangarcha*.

Notes.

The vse of *Elephants* was greater amongst the people of *Asia* and *Africa*. Those of *Europe* esteemed them not much. And yet we finde, that they were brought into the field by the *Romans* also; who first saw *Elephants* in *Italy* in the warres; they had against King *Pyrrhus*. The *Indian* *Elephant* was preferred before the *African* for greatness of body, strength, and courage. Many things are written concerning the (cruse of *Elephants*). But because *Ælian* toucheth no more, then the names of the bodies, and the degrees of *Commanders*, I will only note such things, as I finde concerning them in *Histories*. Their kinde of armor, and furniture I haue taken out of *Livy*, and expressed them as wee see, as I could, in figure.

Fig.

The Taſticks

For their power, ſtrength, and manner of fight, ſee Diodor. Sicul. lib. 17. 609. & lib. 19. 717. Polyb. lib. 1. 5. D. & lib. 5. 425. C. 7 their place in baſtaile, Diodor. Sicul. lib. 17. 685. Arrian. lib. 5. 111. Liu. decad. 4. lib. 7. 14. B. Appian. in Syriac. 107. Polyb. l. 1. 34. D. The diſtance one from an other. Arrian. lib. 5. 111.

Light armed in the diſtances betwixt Elephant and Elephant, Diodor. Sicul. lib. 17. 609. & lib. 18. 665. & lib. 19. 685. & 716. Plutarch. in Pyrrho. Remedies againſt Elephants, Diodor. Sicul. lib. 18. 665. & lib. 19. 717. Polyb. l. 1. 42. A. Hirt. de bell. African. 116. Liu. decad. 3. lib. 7. 194. C.

Have noted before the impropriety of names given to militarie bodies as well in the armed and the light armed ſorte, as in horſe troupes, and in Chariots. That defect is no leſſe in Elephants. The Commanders and commands of them having names, which were at firſt large, and impropenough, but afterward made good by uſe, and received by the Taſticks as ſignificant to expreſſe the things, for which they were invented. The firſt is given to him that is to command one Elephant. Who is called

1 Zoarchos] The Commander of a living creature, that is of one Elephant. The next is

2 Therarchos] A Commander of Beaſts: which name is appropriated to him, that commandeth two Elephants, and the body is ſelfe is named a Therarchie.

3 An Epitherarcha] Having the authoritie over the Therarchie and the body is called an Epitherarchie comprizing ſoure Elephants.

4 An Ilarch] As it were the Commander of a troupe; and the body is called an Ilarchie. It is commonly applied to horſe, and ſignifieth a horſe troupe, and Ilarcha the Capitaine. But here Ilarcha ſignifieth the Commander of 8 Elephants.

5 An Elephantarch] A Commander of Elephants; as though the other bodies before mentioned were not of Elephants. Such ſtraights are men often times driven unto in deuſing new names for new things, which notwithstanding paſſe afterward and growe familiar by uſe. Elephantarcha commandeth 16 Elephants, and the command is called an Elephantarchie.

6 A Keratarch] The Commander of a wing, the body a Keratarchie, having in it 32 Elephants. A wing of Chariots had as many.

7 A Phalange] This is the greateſt body and conſiſteth of 64 Elephants. But as Chariots may be ordered into many Phalanges, and yet the ſame names retained in euery one of the Phalanges, ſo it is in Elephants. For that armies haue had in them at once 64 Elephants appeareth by Hiftories. Polybius, and Diodor Sicul. teſtifie, the firſt that the Carthagineans, the laſt that King Porus againſt Alexander had the one 140, the other 130 Elephants in their armies. The ſame Polybius ſaith that Ptolomey had againſt Antiochus 73 Elephants in his army, and Antiochus 102. And Plutarch reporteth that Androcottus, King of a part of India, gaue to Seleucus at one time 500 Elephants

c Polyb. lib. 1. 39. B. d Diod. Sicul. lib. 17. e Polyb. lib. 5. 425. f Plutarch. in Alexand.

The names of military motions expreſſed in this booke.

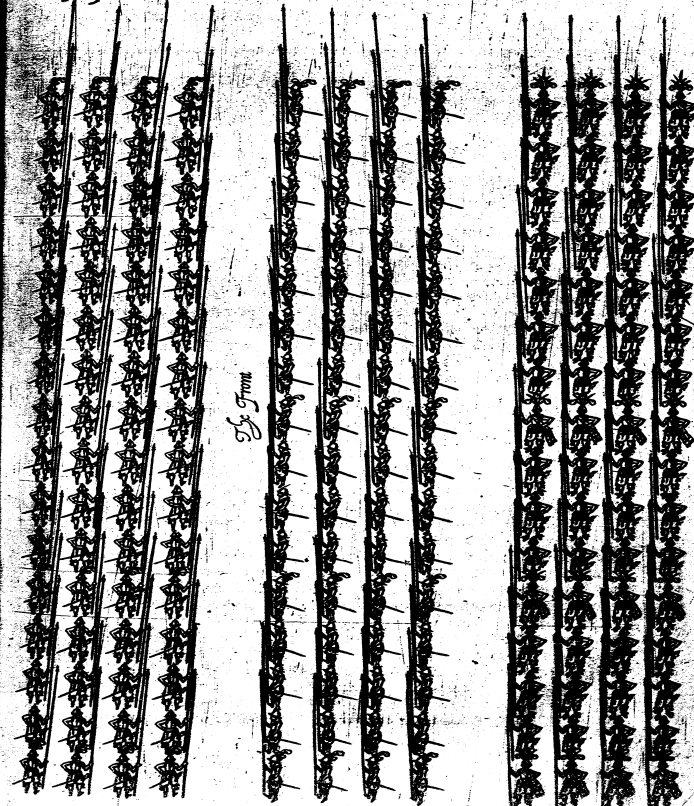
CHAP. XXIV.

THEſe haue we ſet downe in particular the kindes of perfect Forces together with the ſeueral names of euery body; Which being premiſſed, it ſeemeth fit

From the
right hand
To the front

One of one turning of
Faces to the
right hand

The first standing



To the front

To the front

fit to deliuer the words of exercise, that when the Commander, shall will any thing to be done, the Souldier in daily experience acquainted before with the signification of euery of them, and with the moouing in each figure may easily performe and execute, whatsoeuer is commanded.

There is a motion called *Clisis* whereof one kinde is to the Pike, the other to the Target; Another is called *Metabole*; another *Epistrophe*; another *Anastrophe*; another *Periphasmus*; another *Eperiphasmus*; besides we lay to *file*; to *ranke*; to returne to the first posture; to *counter-march*; to *double*. Likewise we vie the words Induction; and Deduction to the right, or left hand; a broad-Phalange; a deepe-phalange; and *emenen-fronted Phalange*; and *Parembolæ*; and *Protaxu*; and *Entaxu*; and *Hypotaxu*; and *Epitaxu* and *Proflaxu*. The signification of which words I will shortly deliuer. And yet I am not ignorant, that the precepts of warre are not by all *Tacticks* expressed in the same tearmes.

Notes.

A *Ælian* in the Chapters precedent, hath numbred up all kindes of forces, as well foote, as Horse, and Chariots, and Elephants; that in ancient time were accounted necessarie for warre. And hath giuen them their armor, and furniture, and distinguished them into militarie bodies, and embattailed them, and taught the distances, that they ought to hold in fight. It followeth now that he sheweth of motions military; which are the life of an armie, and onely giue meanes of victorie; and without which all preparation of forces is vaine, and availeth nothing in the field, nor to the end, for which they were leuied. This Chapter then containeth the names of those motions; the following Chapters the particular explication of them. To which we will note, what we finde in ancient writers. For the signification of the words, I referre them to the severall Chapters, where they are expounded.

Of turning, and double turning the Souldiers faces,
as they stand embattailed.

CHAP. XXV.

C *Lisis* or turning of the face, is the particular motion of euery Souldier declining his face either to his Pike, that is to the right hand, or to his Target, that is to the left hand. The vse of it is, when the enimie sheweth himselfe in flanke² to encompassse our winges, or else to charge vs: or for some other cause, whereof I will speake in conuenient place. ¶ Two turnings of the face towardes the same side transerre the fight of the Souldier to the rear of the battaile. And this kinde of motion is called *Metabole*: being also vied either to the Pike, or to the Target. In the first standing the moouing of the Souldiers face toward the Pike is called *Clisis*, the second moouing the same way *Metabole*. For *Metabole* is the conuersion of euery mans face particularly to the place, which was behinde his backe. And the same that *Metabole* is in ech seuerall Souldier, the same is *Periphasmus*, or wheeling about in the whole battaile. There are ¶ two kinds of *Metabole*, the one from the enimie, the other to the enimie. *Metabole* is defined to be a changing of euery mans face in particular from the front to the

reare;

reare; or contrariwise. Turning about from the enimie is, when the Souldier turneth his face twice towards the Pike; To the enemy, when hee turneth twice towards the Target.

Notes.

Foure kinde of Motions are set downe by *Ælian* whereby upon any occasion the battaile may be somewhat changed: Turning of faces, countermarch, wheeling, and doubling, whereof the first may be used, in what order soener your battaile standeth, the second only in open order, the third in close order only, the fourth either in close, or open order. Clitis, or turning of faces, whereof this Chapter intraceth, albeit it may be brought in also in open Order, yet it is not don for the most part but in close order, and then especially, when none of the other motions haue place. The *Græcians* alwaies conented to bring their file Leaders, that is their best men, to fight. In open Order they chose to countermarch; In close Order, hauing place, to wheele their battaile about, and so turne the face of it against the enemy. If they could doe neither of these, they came to the last remedy, which was turning of faces of euery particular man in the battaile.

1 Clitis, or turning of faces] This motion is of lesse paines then any other, but of no lesse importance, or necessitie. In the rest the Phalange chaungeth the place, or the forme: In this it holdeth both, and yet is ready for any attempt of the enemy. Onely euery Souldier in particular turneth his countenance to the right or left hand, as he is commanded. To turne his face to the Pike is to turne to the right hand, because that hand bore the pike, to turne to the Target is to turne to the left hand; because the *Macedonians* caried their targets on their left shoulder. For the use of this turning of Faces, *Ælian* saith, It hath place when the enimie sheweth himselfe in flanke.

2 To incompasse our wings] Clitis is no more, then bearing faces to the right, or left hand, that is to our wings. When then we finde our enemies, to incompasse our right wing, wee turne our faces, and weapons that way to receive him: to the left, when he cometh to charge vs on that side. If on both sides, then turne wee the face of our Phalange halfe to the right, halfe to the left hand; which is the Antilomus Phalange whereof *Ælian* speaketh hereafter. Briefly, there is almost none of the marching Phalanges which are afterwarde described, but it hath neede of this motion. Besides if upon any occasion the Phalange be to moue from any of the flanks, you are only to command Turning of faces to that flanke, and then to lead on. I will give an example, or two. ^a Alexander at Arbela hauing imbattaild his armie to fight with *Darius*, had intelligence, that *Darius* had throwed the ground betwixt the two armies with Calthropes. He commanded therefore the right wing, which himselfe led, to turne faces to the right hand, and follow him, to the end to go round about, and auoide the places, that were sowed with Calthropes. *Darius* marching against him to the left hand, disioyned his troups of horse, and *Alexander* taking the aduantage, and giuing in quickly betwixt the spaces, put *Darius* to flight. If *Alexander* had marched on with the right front, he had fallen upon the Calthropes. To auoide them, he used the benefit of this motion, and turning faces to the right hand he led on, untill hee had passed the danger, and then turning againe to the first posture, went to charge, and defeated the enimie. Another example is in ^b Polybius, who describing the battaile betwixt *Machinidas* the *Lacedemonian* Tyrant, and *Philopœmen* the *Achaean* Generall, telleth, that *Machinidas* hauing in the left wing put the *Achaean* mercenaries to flight, followed hard the chafe. *Philopœmen* as long, as there was hope, indeuoured by all meanes to stay his men: when he law them vtterly defeated, hee hastied to the

right

right wing, and perceiving the enimie busie in chafe, and the place void, where the fight had beene, commanding the first *Merarchies* to turne their faces to the right hand, heeled them on with high speede, not yet breaking the order of their imbattailing. And quickly leazing vpon the forsaken ground, hee both cut betwixt them, that gaue chafe, and home, and withall got the aduantage of the vpper ground against the left wing of the armed. Whereby hee obtained the victory. If *Philopœmen* had in this action used wheeling of his battaile, which onely was the other motion, which would haue serued his turne, besides the troublement of the winding about, he should haue bene forced to haue used two wheelings, and so failed of the clerity, which was at that time requisite. Faces were turn'd in a trice, and he made himselfe Master of the ground, hee desired, before hee could haue wheeled once his battaile.

3 Two turnings of the Souldiers face] Clitis, or turning faces to the right, or left hand, consisteth of one turning and moueth no further, then the side. If the motion be to the reare, it hath two turnings, and is called *Metabole*, which is defined to bee a changing of euery mans face in particular from the front to the reare, or contrariwise. And as wheeling of the whole body carrieth about the fronts of the battaile to the reare; So doth *Metabole* turne the face of euery particular Souldier, and maketh him looke from the front to the reare. The word properly signifyeth a change, which happeneth herein, when the Souldiers are changed from the front to the reare, or contrariwise. The use of *Metabole* is principally to resist the enemy that giues on upon the reare. ^a So *Pyrrhus* being entred the *Citie* *Argos* with a few, and overpressed with multitude, retired by little and little, and defended himselfe, often turning his and his Souldiers faces against the enemy. ^b So the armie of *Cyrus* the elder retiring from the walles of *Babylon*, ^c *Xenoph.* Cy. ro. lib. 7. 189. often turned about their faces to the left hand, and waited their enimie, who *D.* were reported to be on foote, and ready to come and charge them. And if the enemy assault both the front, and reare, it hath bene the manner to continue halfe the Souldiers in each file with their faces to the front, and command the other halfe to turne their faces to the reare against the enimie behind. And this forme is called *Phalanx Amphitomos* described by *Ælian* cap. 38. And sometimes it is used to speed our march, and prevent the enimie, as was said before of Clitis. ^d *Agellaius* made an incursion into the Territory of the *Thebans*, and finding a Trench, and Ramper call'd vpon the *Thebans* for defence of their Countrey, and onely two narrow waies betwixt, he cast his armie into a hollow *Plinthium*, or Iorque, and led it against the left hand passage, whither all the *Thebans* flocked for defence. But hee turning about faces from the reare, hastied away, and gained the other passage, where no man was present to resist, and entring spoiled the Countrey, and returned without impeachment.

4 There are two kinde of *Metaboles*] Before were rehearsed two kinde of turnings of faces about, one to the pike, the other to the target, here is added to a more, one from the enemy and the other against the enimie; which are all one indeed, and differ only in name. What the true meaning of these turnings should be, I am in doubt, *Ælian* expounding them one way, *Suidas* an other. *Ælian* esteemes them by the right, and left hand, *Suidas*, albeit he haue that signification also, esteemes them by the front and reare. The force *Suidas* defines the turning from the enimie to bee a turning about, toward the reare: that against the enimie, a turning about toward the front. *Ælian* would haue the first to containe two turnings toward the right hand, the second two turnings toward the left. I for my part dissent rather to *Ælian*. For touching the turnings of *Suidas*, I cannot yet understand, why turning toward the reare should be a turning from the enimie; Or toward the front a turning to the enimie: Considering that whether

^a Polyen. lib. 4. in Alexand. § 17.

^b Polyb. lib. 11. § 24.

^c Xenoph. Cy. ro. lib. 7. 189. ^d Agellaius.

whether sooner you turne faces, the enemy is imagined to be there: faces and weapons being to bee opposed alwaies against the enemy, which is the onely end of turning. Elians opinion seemeth to haue more probability in it, at least if I conceiue the right reason. For I take it thus: That seeing the Græcians (as the Romans likewise) were Targeteeres, and caried their targets on their left side, and in fight advanced that side alwaies neerest the enemy, which they sought to couer with their targets, that therefore the turning about to the enemy, was called turning to the Target, as contrariwise turning to the right side, on which side the Pike was caried, and which being naked of such defensiu armes was called the open side, and therefore further removed from the enemy, might for the same cause be termed turning from the enemy. So that I take turning about to the enemy, and turning about to the target to be all one, as also turning about from the enemy, and turning about to the Pike, howeouer the name differ. This is my coniecture, which I shall imagine to be true, till I find some man, that will be pleased to giue me a more probable reason: I only adde now the words of command in this motion.

Faces to the right hand.
Faces to the left hand.
Faces about, to the right or left hand. } As you were.
The figure sheweth the manner.

Of wheeling, double, and treble-wheeling of the battaile,
and returning to the first posture.

CHAP. XXVI.

Episprophē (or wheeling) is when the battaile being so closed, that no man can turne, or twice turne his face by reason of the neerenesse of man to man, it wholly, and jointly wheeleth (as a ship, or some other body caried about) the order thereof remaining undissolved. When the wheeling is to the Pike, we warne the right-corner-file-leader to stand still (as it were the hooke of a doore hinge) and the rest of the battaile proceeding forward to turne about the same file-leader like the doore. In the same manner is wheeling to the Target; It may be thus defined: *Episprophē* is, when shutting the battaile by gathering close the Followers, and Side-men, we turne it wholly (as the body of a man) toward the Pike, or Target, it being caried about the corner-file-leader, as about a Center, and, changing the place of the front, transference the countenance of the souldier to the right, or left hand; the followers and sidemen euery one remaying in file and ranke as before. How it is to be done I will shew hereafter.

Anastrophē, or returning to the first posture, is the restoring of the wheeling to the place, where the battaile first stood close, before it beganne to wheele. *Perispsalmos*, or wheeling about, is the motion of the battaile in two wheelings, so that thereby the front commeth to the place of the reare. *Eperispsalmos*, or treble wheeling, is the motion of the battaile in three wheelings, so as, when it turneth to the Pike, the front commeth about to the left flanke; when to the Target, it commeth about to the right flanke.

Notes.

Notes.

THis Chapter hath a diners kinde of turning from the other mentioned in the last Chapter, which for distinction sake, is called *Episprophē*, or wheeling. The other turned no more, then the souldiers faces, euery man yet keeping the same ground, he had before. This wheeles the whole body, and changeth the place of the Phalanx either to the right, or left hand, or to the reare. And as there was in the turning of faces a particular motion of euery particular souldier to the right, or left hand, called *Cilisis*, and an other turning about called *Metabole*: so is there in this a general wheeling of the whole body to the right, or left hand, called *Episprophē*, and an other wheeling about to the reare called *Perispsalmos*. But let vs heare the description.

Episprophē (or wheeling) is, when the Battaille Shortly *Episprophē* is no more, then the first turning of the battaile to the right or left hand. In doing whereof first the files must be closed to the hand, you meane to wheele, then the ranks. Then the corner file-leader on the same hand is to stand still, then all the rest keeping their files, and ranks closed, to turne to the same hand jointly about the Corner-file-leader circle-wise, who is to move by little, and little, till he haue turned his face to that side, which was intended. And when the first ranke is even with him, and the rest wheeled enough to the same hand, they are to stand still: The words of the definition of *Episprophē* (or wheeling) are plaine enough in Elian; I neede use no exposition. Now because in exercise we relye not upon one forme of motion alone, but acquaint our souldiers with all the kindes; it is necessarie to bring the body againe to the first place, so the end we may proceede in the rest. This reducing to the first posture is called *Anastrophē*, by which the battaile returneth, but by a contrary hand, so that, to which the *Episprophē* was made. And bus for changing the hand the wheeling backe againe is all one with the wheeling forward. Wee shall see hereafter how it is done. To bring the battaile to haue the front, where the reare was, you must use a double wheeling. And that is called *Perispsalmos*. Which consisteth of two *Episprophēs*, and is made either to the right, or left hand. Onely it must be observed, that if the *Perispsalmos* (or wheeling about) be to the right hand, the *Anastrophē* (or reducing to the first posture) must be to the left. Contrarie it is if the *Perispsalmos* were to the right hand.

Episprophē I could neuer hitherto conceiue any use of a treble wheeling (for so Elian takes the word) unless a *Perispsalmos* were first made, and the battaile had the front already brought to the reare, and so an *Episprophē* added from the reare to the same hand. Otherwise seeing that one wheeling is sooner made, then two, and therefore sooner then three, I see no neede of three wheelings, especially seeing we may doe that, we desire with one. For example, let vs wheele our battaile thrice to the right hand, the front will come to be in the place of the left flanke. The same will be performed as well with one whelving to the left hand. Et frustra fit per plura, quod potest fieri per pauciora, especially in matter of warre, where the least moment of time often carrieth the whole business. The like may be said of *Eperispsalmos* to the left hand.

The use of the motions of wheeling, and double wheeling, is, when the battaile being closed, and the enemy comming to assault you in any other one place, then the front, you seeke to bring the best men to fight. For if you be to be charged in two places at once, or more, wheeling helps little; except it be to turne the front to one enemy, and in that case your onely shift is, to turne faces against them, that come to charge, on what side soeuer they come. Examples of these two motions, I meane *Episprophē*, and *Perispsalmos* meete vs almost in euery Greeke Historie. Of which I will represent one, or two, especially of the latter

The Tactics

latter; he rather because practise giueth both light, and life to precepts. * Plutarch recounteth, that after King Pyrrhus, had in vaine assaulted Sparta, he was invited by an Argian named Aristeus to receiue Argos into his protection, and that hee marched thitherward with his armie. Aristeus the king of Lacedemonia laying ambushes for him, and taking the principall freights, by which he was to passe, charged his reare, wherein the Galatians and Molossians were. When Pyrrhus heard the bruite and noise, he sent his sonne Ptolemy with the band of Companions to aide, himselfe with all speede marching out of the freights, led on his armie. The medly being sharpe about Ptolemy, and the chosen Lacedemonians commanded by Eudæus standing close to their busines, Orestes a Candiot of Apta, valiant of his hands, and swift of foote, running crosse against the young Prince gaue him a deadly stroke and ouerthrew him. His fall made the rest to flie. And the Lacedemonians hauing the victorie, and following the chafe came into the Champion ground still killing but not remembering they were not followed with armed foot. Vpon whom Pyrrhus, hauing euen then heard of, and being much moued with the death of his sonne, wheeled about the Molossian horsemen. And himselfe first aduancing vpon the spurre imbrued himselfe with the slaughter of Lacedemonians. He alwaies seemed mighty, and terrible in armes; but then he exceeded himselfe in daring and valor. For turning his Horse vpon Eudæus who shunning him, shifted aside, and with all strooke at his bridle hand as he passed by, and wanted but little of cutting it off. But missing the hand, he light vpon the raines, and carried them quite a funder. Pyrrhus with all strooke him thorough the body with his Lance. Then leaping from his horse, and fighting a foote, hee cut in pieces the chosen Lacedemonians, that fought to recouer the body of Eudæus. This was the fight that Pyrrhus made by wheeling about his Horsemen against the Lacedemonians, that followed vpon his Reare. Another example of Wheeling about is reported by Polybius, and it is of Amilcar Annibals father, this is the history. The mercenary souldiers of the Carthaginians revolted from them, and ouerthrew some of their Generalls, and shut them vp within the Citie of Carthage, possessing both other freights, that led into the Countrey, and also a bridge laide ouer a riuer called Astar, which riuer was not passable, but by that Bridge. Besides, they built a City for defence of that Bridge. Amilcar seeking to dislodge the enemy from that Bridge, and hauing no way to come at them conveniently; obserued, that when certaine winde blew, the mouth of the riuer toward the sea was commonly filled vp with sand, and would giue passage sufficient for his armie. Finding then at first time, hee put ouer his armie in the night, and before day, or ere any man knew of it, made himselfe Master of the passage, and presently led against them, that held the bridge. Spendius (hee was one of the chiefe Rebels) hearing thereof, aduanced to meete Amilcar in the plaine, and both ten thousand from the City at the bridge foote, and fifteen thousand more from Africa, came out one to aide another, thinking to wrappe in the Carthaginians betweene them; who were not about ten thousand Souldiers of all sorts, and 70 Elephants. Amilcar led on his armie. Before were the Elephants, the horse, and light armed followed next, the armed foote came last. And perceiving the enemy, that followed his Reare, pressed hard vpon him, he commanded his whole armie to tume about. Those that were in the Vanguard of the march hee wheeled about, and straight opposed against the enemy. The Libians and mercenaries imagining the Carthaginians fled for feare, fell vpon them disorderly, and boldly came to

of Elian.

to hands. But when they saw the Horsemen, being now turned about, and come vp neere to the foote, and already put in order, make a stand, they themselves, by reason they looked for nothing lesse, fell into a feare, turning their backs fled presently, as before they gaue on vnadvisedly, and straglingly. And some of them falling vpon their owne people, that were coming on, wrought both theirs, and their owne destructions: other some were trampled vpon, and rode to death, by the horse, and Elephants, that followed the chafe. Thus saith Polybius. And thus saith of Wheelings. The figure, and words of command are referred for the 32 Chapter, where the manner of wheelings, and returning to the first posture is set downe.

Of filing, ranking, and restoring to the first posture.

CHAP. XXVII.

TO file is, when euery particular man keeping equall distance from other standeth in his owne file lineally betwixt the file-Leader and bringer-vp. To rank is, to be in a right line euen with his sidemen in the length of the battaile. To restore to the first posture is, to bring the fight of the Souldier to the same aspect, he had before the first turning. As if his face were at first towards the enemy, being commanded to turne towards the Pike, and thence to returne to his first posture, hee is againe to retume his face toward the enemy.

Notes.

OF filing, and ranking enough is spoken before.
 1 To restore to the first posture] This motion differeth from Anastrophie before specified. For Anastrophie bringeth backe againe the whole body to the first place after wheeling: This the Souldiers faces particularly to the first aspect. So that this is used after the making of an Anastrophie. For alwaies in motions it is requisite, that the Souldiers faces moue forward. To moue backward hath many inconueniences of stumbling vpon uneven ground, or stones, or pittes, or such like. Which is the cause that in Anastrophie after wheeling, Elian willet, that the Souldiers turne their faces the contrarie way first, then moue on, till they haue recovered their first ground, then open ranks, and files, and lastly to restore to the first aspect. And as it differeth from Anastrophie so differeth it likewise from Metabole. Metabole only turned faces about, this setteth the Souldier in his former posture, not onely for his face, but for his armes, also, which are ordered as at first. The wordes wherein this motion is expressed by Elian are Ep orthon apodounai, and Eis orthon apocatelalai, which is interpreted by Gaza in arrectum reddere, to restore vp right, by Arcerius rectum reddere, to restore right, and so the words sound. Elian interpreteth it to set againe the Souldiers fight in the same aspect in which it stood at first: as if being placed with his face against the enemy he be commanded to turne his face to the Pike, and then againe to restore his face to his first posture, he must retume, and set his face against the enemy. Elian therefore referreth it to the fight, he first had, which if hee see the right meaning, how can it

The Tactics

a Pausan. in
Attica 2. p.
b Pausan. in
Corinth 89.
c Pausan. in
Corinth. 87.

d Diod. Sicul.
lib. 15. 473.

be upright, or right, more in that, then in any other posture. For the Souldier not onely in front, but in flanke, and in the reare carrieth himselfe upright, or right. I doubt not, but that it may be applied to the upright standing of men, as appeareth by sundry places of Pausanias: Wherever, that Minervas Image set in the Temple Parthenion standeth upright, orthon est, and in another place, that in Corinth in the Temple Pantheon, there were two Images of Mercurie standing upright, Ortha, and that in the Temple of Fortune the image of Fortune was carved of Parian stone, and stood upright; Orthon: and that in Neptunes Temple situate in the Corinthian Isthmus, the images of Amphitrite and Neptune stand in a Chariot, and the boy Palemon upright upon a Dolphin, Orthos. In all which places Orthos designeth the site of men. But here, as I take it, it cannot be so applied. Because in every motion, not onely in this, the men stand upright. How then can they be restored to their standing upright, when they doe it already. I take the original of the appellation to come from another cause, and that is from the ordering of the Pike. For when the battaile is first set in the field, every Souldier standes with his Pike ordered, that is upright. For to order a pike is to set the butt end on the ground before the Souldier somewhat wide of his right foote, and to hold it upright with the right hand borne even with the shoulder. But when you beginne, or continue any motion, the manner is to aduance, or to shoulder the Pike, and so to procede. But being commanded to returne to the first posture, it must be ordered againe. So that the first posture of an armed man is to stand with his pike upright. And after many motions and windings, he at last returneth to the same posture, which I take the command of Ep'orthon apodounai to signifye. Now that I may not seeme to relye upon a probable conjecture alone, I will bring witness for the confirmation of my opinion. It is reported by^d Diodorus Siculus, that Agesilaus the Lacedemonian King with an armie of eighteen thousand foote, and fifteen hundred horse, invaded Beotia. The Athenians before hearing of Agesilaus comming had sent five thousand foote, and 200 horse to aide the Thebans, who gathering their armie together seized upon a long narrow hill distant 20 furlongs from the City; And making the hard access to the place a kinde of fortification against the enemy, they there waited his comming, fearing to hazard upon even ground in regard of the renowne, and glory of Agesilaus. Agesilaus, having imbattailed his troups, led them against the Beotians; and approaching neere, sent his light armed to found their disposition to fight, which being easily repulsed by the Thebans by the aduantage of the higher ground, hee aduanced the rest of his forces being imbattailed in such manner, as might give greatest terror. Chabrias the Athenian willed his Souldiers to awaite the enemy contemptuously both keeping their first array, and their Targets at their knees, and continuing their Pikes upright ordered; who when they jointly as upon a word giuen, did as they were commanded, Agesilaus both wondering at the good order, and at the assured fashion of the enemy thought it not fit to strue with vnequal ground, and by forcing them to fight, to compell them to be valiant, whether they would, or no. Hitherto Diodorus Siculus of the Strategem of Chabrias against Agesilaus, which consisted in the contempt of Agesilaus, and all his forces: First in not stirring one foote, to meete the enemy, then in keeping the array they held before, further in sincking their Targets to their knees; Lastly in continuing the former order of their Pikes, that is not making ready to charge, but remaining with their Pikes ordered, as they were at first. Agesilaus aduancing his armie thought to strike a feare into his enemy, Chabrias trusting to the strength of the place, scorned the Brouado of Agesilaus, conceiuing, he would not be so hardly to aduerture the fight upon so great an inequality of ground. He therefore willed the souldiers

alib.
iso.

l. Prob.
ria.

The Front

Diod. Sic.
15. 473.

souldiers



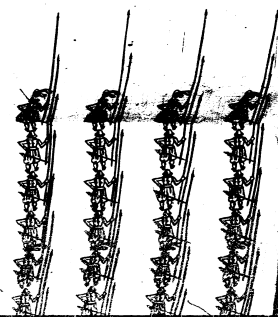
The Macedonian Countermarch
by file

The reate

The Countermarche in action



The front after Countermarche



The bringers up dismarching

The front of the first standing

The Countermarche in action

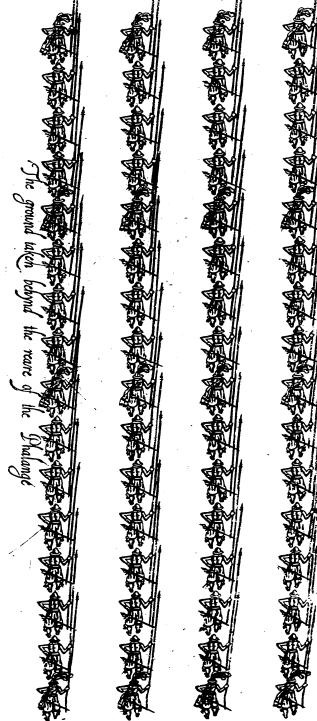
The bringers up dismarching

The front after Countermarche

The ground taken before y^e front of the Trading

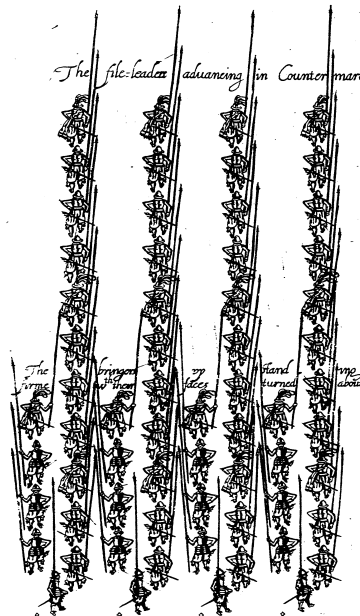
Can 2
The Lacedaemonian Countermarch

The front after Countermarch

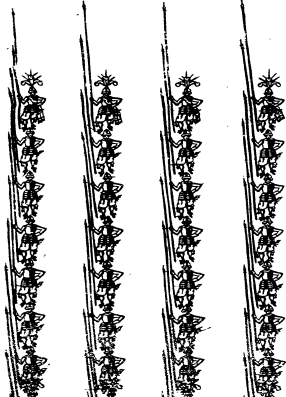


The Countermarch in action

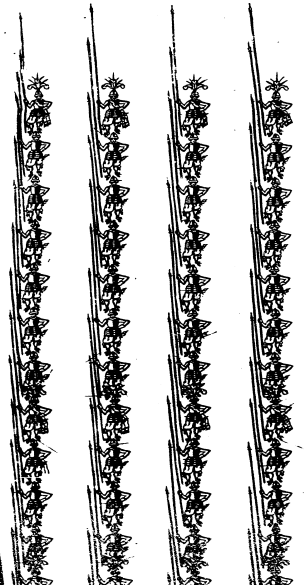
The file-leader advancing in Countermarch



could not be so
here will be the
soldiers

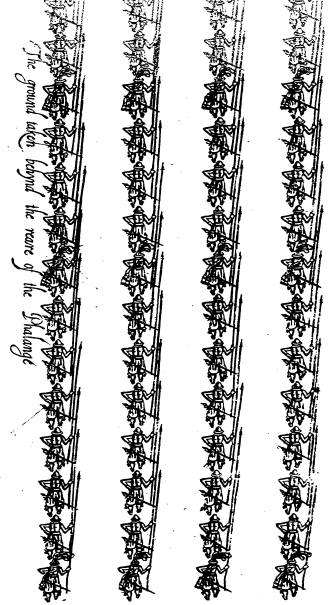
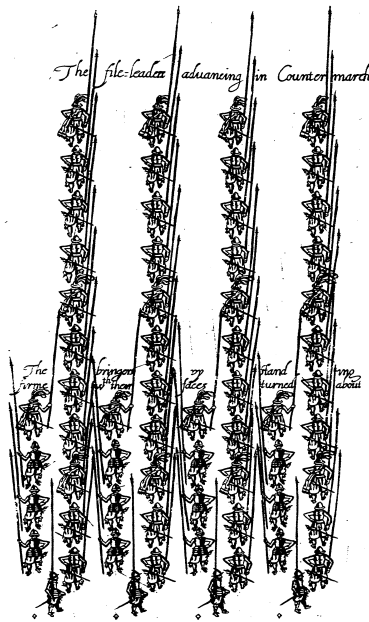


great an inequality of ground
 could not be so
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The Countermarch in action

The file-leader advancing in Counter march



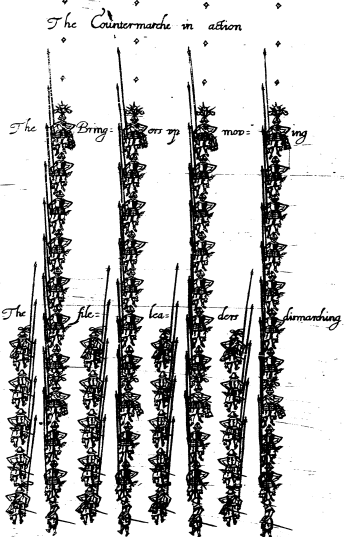
should not be so
hardy to adventure the fight upon so great an uncertainty

should not be so
hardy to adventure the fight upon so great an uncertainty



The front in the first standing

Cyr. 20
The Grecian Countermarch



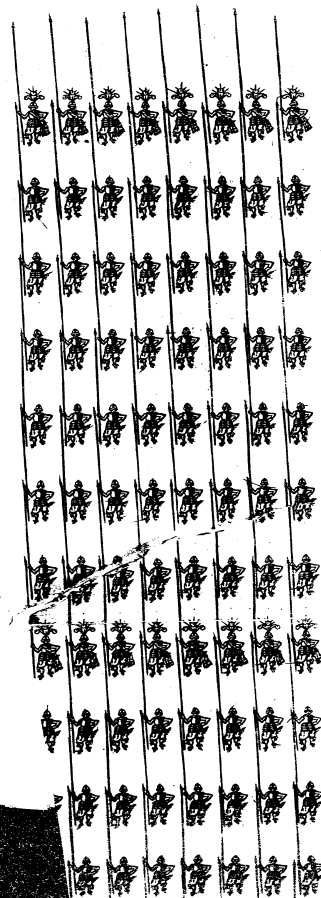
The front after Countermarch

a. Prou
b. Paul
c. Paul
d. Paul

d. Di
lib. 1

Gay-20
Cuntermarke by Ranke

The Cuntermarke in action



diers not to alter their posture, but to continue as they were. The words concerning the Pike are: En ortho to dorati menein. That is to continue their pikes vpright (En ortho) Now whether the same be the posture, that the Tactics describe, when they speak or restoring Ep' ortho, vpright, I referre to the iudgement of the Reader. ^a Polienus remembering this Stratagem useth somewhat different words, and yet consenteth in Agefilao. ^b Polien. lib. 4. in meaning. Chabrias saith he commanded his Souldiers not to runne out against the enemy, but quietly to stand still holding their pikes before vpright, and their Targets before their knees which they were wont to doe, when they would a little ease themselves of the weight of their Targets. Where Diodore, hath en ortho to dorati menein, to continue their Pikes vpright. Polienus hath protinomenous ta dorata ortha, holding before them their Pikes vpright. But both haue pikes vpright, and Diodorus his Continue hath relation to the Posture they were in, which Chabrias would not haue them to alter: Polienus his hold before to that they were commanded to doe. In ordering of Pikes as this day I haue shewed, that the Souldiers hold them vpright, the but end set on the ground before, and somewhat wide of their right foot. ^c Æmil. Prob. in Chabria. 107. Æmil. Prob. reciting this historie peruerteth the Stratagem: He saith that Chabrias forbad the Phalange to giue backe, and taught his Souldiers to receiue the enemies charge kneeling with one knee, the other set against the Target, and with the Pike abafed. Wherein hee quite dissenteth from Diodore, and Polien. Diodore saith, the command was to keepe their array; Polienus not to runne forward, but quietly to stand still; Probus not to giue backe. Probus saith, they should kneele with one knee, and rest against the Target with the other; Diodore that they should hold their Targets funke to their knees; Polienus that they should carry their Targets before at their knees. Probus that they should abafe, and charge their Pikes; Diodore that they should continue, and order them vpright; Polien that they should hold their Pikes vpright. So that Diodore and Polien agree, and expound one another: Æmil. Probus bringing in a new historie dissenteth, as I said, from the other two; especially in making that to be a forme of fight prescribed by Chabrias (a simple forme to receiue the charge upon their knees) which was a contempt, to shew how little, especially in that strength of ground, he regarded Agefilao; which contempt also made Agefilao retire, not doubting but it proceeded from a great assurance of the enemy. Therefore as I said I take these words ep' orthon apodounai, not only to appertaine to the aspect of the Souldier, but also (and that much rather) to the erection, and ordering of Pikes.

Of Countermarches, and the diuer kinds thereof, with the manner how they are to be made.

CHAP. XXVIII.

There are two sorts of Countermarches, one by file, the other by ranke; each of these againe is diuided into three kinds. The first called the Macedonian: The second the Lacedemonian: The third the Choraan, which is also the Persian; and the Cretan. The Macedonian is that, which leauing the ground, it first had, taketh in lieu thereof the ground, which was before the front of the Phalange, and turneth the aspect of the Souldier backward [where before it was forward.]

2 The *Lacedemonian* is that, which leaving likewise the ground it first had, raket in steed thereof, the ground which was behinde the Rere of the *Phalange*, and turneth also the face of the Souldier the contrary way.

3 The *Persian* is the *Cretan*, and *Chorazan*: This keepeth the same ground of the *Phalange*, every souldier taking another place for that, he had, the file-Leader the place of Bringer-up, and to the rest in order; and turneth also the face of the Souldier the contrary way.

4 *Counter-marches* by ranke are made, when a man would transferre the wings into the place of the Sections; and the Sections into the place of the wings, to the end to strengthen the middelt of the battaile. Likewise the right hand parts into the left hand parts, and the left hand parts into the right hand parts. They that feare to counter-march the *Phalange* in grosse the enemy being at hand, doe it by *Synagmas*.

I will now let downe, in what manner counter-marches ought to be made.

The *Macedonian counter-march* by file is said to be, when the file-leader turneth about his face, and all the rest with the Bringer-up go against him on the right, or left hand, and passing on to the ground before the front of the *Phalange* place themselves in order one after an other, according as the file-Leader himselfe hath turned his face. Therefore it maketh shew to the enemy appearing in the Rere, of running away: Or it is when the file-Leader turneth about his face, and the rest passing by him on the right or left hand place themselves orderly one behinde another.

But the *Lacedemonian* is, when the Bringer-up turneth his face about, and all the rest turning also their faces, and proceeding forward together with their file-Leader order themselves proportionably in the ground, which was behinde the Rere of the *Phalange*. Wherefore to the enemy appearing behinde, it makes a semblance of falling on. Againe the *Lacedemonian* is, when the file-Leader turning his face about to the Pike, or Target transferreth the whole file to another place equal to the first; and the rest following stand, as before, behinde him. Or else, when the Bringer-up turneth his face about, and hee, that stood next before him, passing by on the right or left hand, is placed againe next before him, and the rest following are placed one before another in their former order till the file-Leader be the first.

The *Chorazan* is, when the file-Leader turning about toward the Pike, or Target, precedeth the file, and the rest follow, till the file-Leader have the place of the Bringer-up, and the Bringer-up the place of the file-Leader. And these are the Counter-marches by file.

In the same manner are *Counter-marches* made by ranke in case a man would counter-march by ranke. For every ranke Counter-marching either keepeth the same ground, or changeth the right hand place, or else the left hand place, of the battaile, one of which must needs fall out, and neuer faileth.

Notes.

The two former motions are performed, one in close Order, the other in all Orders; Epitrophe when the battaile is first so close, that (as Elian saith) a man can turne his face neither the one way, nor the other. Clisis in open Order, Order, and close Order. The two following motions, Counter-march, and Doubling, one is done in open Order, the other for the most part in open order too; and yet sometimes in Order, and close

close order; as we shall see in due place. This Chapter handleth Counter-marches, the next Doublings. Counter-march is a motion, whereby every souldier marching after other, changeth his front for the reare, or one flank for the other. For there are two kinde of Counter-marches, one by file, and the other by ranke. And each of these is againe divided into three; the first is called the *Macedonian*; the second, the *Lacedemonian*; the third the *Chorazan*, or *Cretan*. A Counter-march by file is, when every souldier followeth his Leader of the same file, By ranke, when every souldier followeth his sideman of the same ranke in the Counter-march.

1 The *Macedonian Counter-march* in this Counter-march, the purpose of the Commander is to turne the front of his battaile against the enemy that sheweth himselfe in the Rere; and withall to take the ground that lyeth before the front of the *Phalange*. It is called the *Macedonian Counter-march* (saith Elian) because the *Macedonians* were the inventors of it. Which of the *Macedonians* he telleth not, but includeth Philip, and Alexander, who both used the *Lacedemonian Counter-march*. And before their times I have not read of any warlike Kings of *Macedonia*. The manner of it is this; First all the file-leaders turne their faces about either to the right or left hand, then the next ranke passeth thorough by them on the same hand; and being come to their distances, place themselves directly behind their file-leaders, and then turne about their faces the same way. And so the third ranke after them, and the fourth, and all the rest, till the Bringers-up be last, and have taken the reare of the battaile againe, and turned about their faces. The figure expresseth not well the action. For in it the Bringers-up begin first to counter-march, which according to Elian should come last. Yet may this Counter-march be done, as the figure is. But I take Elians way to be easier, and readier. And it may be also, that the Counter-march expressed in the figure is left in the text. For one of the *Lacedemonian Counter-marches*, which proceedeth the contrary way, beginneth the motion with the file-leaders, as this doth with the Bringers-up, as wee shall straight see.

2 The *Lacedemonian counter-march* in this Counter-march the proceeding is contrary to that of the former; that took the ground before the *Phalange*, this takes the ground after. In that the moving was from the Rere to the front, in this from the front to the reare. This is the invention of the *Lacedemonians*. Elian describeth it to be done in two manners: One, when the Bringer-up first turne about their faces, and the next ranke likewise turning faces beginneth the Counter-march, and every man thereof placeth himselfe directly before his Bringer-up, and the third doe the like; and so the rest, till the ranke of the file-leaders come to be first: The other, when the file-leaders begin the Counter-march, and every one in their files follow them orderly. The figure expresseth this last. Elian preferreth the *Lacedemonian Counter-march* before the *Macedonian*: because in it the souldiers seeme to fall on, and got to the charge; where in the *Macedonian* they seeme to fly. There are notwithstanding times, when it is better to use the *Macedonian*. As in case you meane to march on, and not to fight with the enemy, except you be compelled: Or else you seek to gaine some ground of advantage. For the *Macedonian* continueth still the march, and stayeth not; the *Lacedemonian* returneth upon the enemy, and so loseth ground in marching. Agesilaus after victory gotten against the Argives, against whom he stood in the right winge, hearing that the Thebans had beaten the *Orchomenians* in the left winge, used the *Lacedemonian Counter-march* against them. The words of Xenophon sound thus: Here the strangers were about to crowne Agesilaus (thinking he had got the victory) when newes was brought that the greek lib 4. Thebans, after they had broken the *Orchomenians*, had forced a passage as farre as 519. C. the baggage. Then Agesilaus, counter-marching his *Phalange*, led against them. The

The Thebans perceiving their Confederates were fled vp to the mount *Helicon*, closed their troups together, as neare as they could, seeking to open a way by force, and to get vp into them. *Agessilaus* albeit he might by guing way to the formolt haue followed them at heeles, and charged the reare, yet did he it not, but met the Thebans front to front. Thus encountering, and clashing their Targets together they fought, thrust on, killed, and were killed. In fine some of the Thebans broke thorough to *Helicon*; other some, as they fought to escape, were left dead on the place.

Xenoph. hist.
græc lib. 6.
605. D.

Agessilaus here followed the chase upon the Argives toward the mount *Helicon*: The Thebans upon the Orchomenians the contrary way towards the enemies Campe. The Thebans [cing their confederates fled to the mount *Helicon*, returned toward them, *Agessilaus* counter-marched to meete them, met them, and fought with them. For the counter-march he used, I make account it was the Macedonian himselfe being a Macedonian. And he used it to meet the Thebans bravely in front. The same *Agessilaus*, after he had by night incamped in a peece of ground behind Mantinea encompassed about with mountaines, perceiving the next morning, that the Mantinians gathered together upon the toppes, that lay right over the head of his Reare-gard, determined to lead his Armie out of the place with all speed. Now if himselfe should lead, he feared the enemy would give upon his Reare. Therefore standing still, and turning his armes against the enemy, he commanded the last of the Phalange to march backe againe from the Reare, and come vp to him; and so at once he brought his Armie out of the streights, and made it by little, and little stronger. When the Phalange was thus doubled, he proceeded in that order into the *Champaigne*, & there againe reduced the depth of the armed foote to 9 or 10 men in euery file. This place of *Xenophon*, if it be not corrupted, is very obscure. And I cannot tell whether to take it for doubling of the front, or the Macedonian counter-march. The words make for a doubling. For *Xenophon* saith plainly, the Phalange was doubled. Besides he addeth, it was made by little and little stronger; which could not be done with a Counter-march. And that a deepe Phalange, or Hearfe, (such as this by the euenings march, and the streights it entred, seemeth to be) is made stronger by doubling the front, there is no question. On the other side, the streights, through which it was to passe, perswade me, it should be a Macedonian Counter-march. For in doubling the front the length still increaseth; & the manner is not to enlarge, but to extenuate the front, when an Armie is to be conveyed through a narrow place. And *Xenophon* saith expressly, that *Agessilaus* led it thorough the streights into the *Champaigne* in that order to which it was reduced last; & that in the Champion the depth of the Armed was lessened, and brought to 9 or 10; for there *Agessilaus* imbailed his Phalange to receive the enemy, if he would charge. And in a march through straight waies the front is commonly narrowed, and proportioned to the way; but in open ground the Phalange is againe brought to the full length. So that it seemeth the depth was much, before it came into the plaine; because in the plaine it was brought to 9 or 10 men, and therefore no doubling. Lastly *Agessilaus*, (and the front I doubt not of the Phalange with him) turned face to the enemy, before the Reare came vp to him, which is done in no other motion than the Macedonian counter-march. In which all the File-leaders first turne about their faces toward the enemy, and then the whole battaile marcheth against the File-leaders, and placing themselves orderly behind them, turne their faces the same way, that they haue done before. Now where it is in *Xenophon*, that *Agessilaus* having gained the *Champaigne*, extended his Armie to 9 or 10 Targets, I suppose it is faults to be in the number of 9; and that it ought to be read 8 or 10. To extend a Phalange is to draw it out in length, the length is the space betwixt the point of both wings. When he saith he extended it to

102

10, the meaning is he drew it out so farre in length that he left but 10 in depth. Ten is the decas, whereof I spoke before, and I haue likewise noted, that the Lacedæmonians for the most part, made the depth of their battaile 8. The number of 9, as all other ancient numbers, was rejected by the Tactics, as unfit for doubling. So that mine opinion is that *Xenophon* at the first wrote 8 or 10, not 9 or 10, howsoever 9 be crept into the place of 8. But to returne to *Agessilaus*, admit he used doubling of ranks, or of the front in retiring out of the Mantingan straights, yet giue me leave to be of opinion, that the Macedonian Counter-march had bene the fittest motion for that purpose. For himselfe being thereby cast in the reare, he had both prevented the charge of the enemy (which he feared) and yet wounded better out of the streights, the long Herle, which still remained in the Macedonian Counter-march, being more proportionable to issue out of a narrow place, then a broad-fronted Phalange, which ariseth out of doubling the front.

3. The Persian is the Cretan or Chorean.] This Counter-march is called the Persian, and Cretan, because it was used amongst the Persians and Cretans. And it was termed the Chorean also, of the similitude it had with the solemn Græcian dances upon stages; the company, that shewed themselves in such dances being called Chorus. Who in their daunces ordered themselves into files, and ranks, as souldiers doe in battaile; and moving forward to the brinke of the stage, when being straightened by the place, they could passe no further, they retired one through the ranks of the other, exceeding not the bounds of the place, as is done in this Counter-march. The other two kinds of Counter-march changed the ground, they had before. The Macedonian took the ground before the front; The Lacedæmonian the ground after the reare. The Chorean holdeth the same ground, & beginneth the motion with the File-leaders, who notwithstanding proceeded no further, then thither, where the Bringers-up stood, their files following them; & euery souldier keeping the same distance, he had before the moving. The figure sheweth the manner of it. These Counter-marches by file are to be made, when the enemy appears in the reare, and cometh to charge vs. And they are made to the end, to bring our best men, that is the File-leaders, to the encounter. Wherein notwithstanding there is a caution to be held, that if the enemy be very neare, or so neare, that we cannot conveniently counter-march, before he come up to vs, we forbear, lest we fall into disorder, and in disorder be easily defeated. In which case the best remedy is to turne faces about, and so receive him thitherto of Counter-marches by file.

Xenoph. de
rep. Lacedæm.
686. E.

See Test cap.
12. 39.

4. Counter-marches by ranke are made.] The ends of Counter-marches by ranke are twofold in *Eliau*: one to strengthen the middle of the battailes, the other to strengthen the wings. If the strength of the enemies battaile, be most in the middle, reason of Warre would, that we should oppose our greatest strength against the middle. If in the wings against the wings. There is an other cause of strengthening the wings, namely if the enemy be ready to charge either of them: and this strength *Eliau* would haue given by the Counter-march of our best men into the wings. It shall not be from the purpose to make all plaine by an example or two. Herodotus reporteth, that before the battaile of Platæa betwixt the Græcians, and the Persians, it was agreed betwixt the Athenians, and Lacedæmonians, that where the Athenians had vanquished the Persians in the battaile of Marathon, and had lately slain Malfistis the Generall of the Persian horse; and by those encounters had good experience of the Persian manner of fight; and where the Lacedæmonians were imbatallied in the right wing against the Persians, the Athenians in the left wing against the Thebans, and other Græcians, that tooke part with the Persians: they should change, and the Athenians haue the right wing, the Lacedæmonians the left.

Theft

These newes were caried to *Mardonius* the Generall of the Persians; who whether fearing the Athenians, or desirous to fight with the Lacedemonians, changed his place from the left into his right wing, to the intent to oppose against them; which when *Pausanias* saw, he returned to his right wing, and *Mardonius* to his left, the place, which he had at the beginning. *Here are changing wings on both parts; The one coming to fight in the left wing, the other desirous to fight in the right. The Countermarch by ranke from the right wing would haue sited Pausanias: as the contrary Countermarch would haue sited Mardonius. Yet am I led to thinke that Pausanias used a wheeling of his battaile, and so conueighed it from one wing to the other behind the battaile of the other Gracians, to the end, that being shadowed by them, he might the better hide his purpose from Mardonius. An other example I finde in Livy and Polybius both. It is this: Pub: Scipio, who was afterward called Africanus, and *Asdruball* the sonne of *Gilgo*, being incamped neare together in Spaine brought daily out of their Campes their Armies one against another. And after they had long stood waiting, who should begin the fight, which was done at neither hand, they conueighed them backe againe. The manner of their imbatailing was this. The Romans, and likewise the Carthaginians mingled with the Africans, had the middle, their Confederates the wings. The opinion was they should fight in that order. *Scipio* when he perceived this to be firmly beleued, the day before he went to fight, made an alteration of all. When night came, he gaue the word thorough the whole Campe, that horse, and men should ride, before it was light day, and that the horsemen in Armes should keepe their horses bridled, and saddled. The day was scarce sprunge, when he sent his horse, and light-armed to beat in the Carthaginian Gardes, himselfe freight followed with the armed Legions: disposing the Romans (contrary to the settled opinion of his owne people, and of the enemy) in the wings, and receiuing the Allies into the middelt. *Asdruball* raised out of his bed with the cry of his horsemen, had no sooner leaped out of his Tent, and seeing the tumult before the trench of his Campe, and the amazement of his people, and the Ensignes of the Legions shining a farre off, and the field full of enemies, presently sent out his whole power of horse to undertake the Roman horse. Himselfe issued out of the Campe with his foote, not changing any thing of his wonted manner of imbatailing. The fight of the horsemen had now a long time bene doubtfull, and could not bee tried, because still, as they were beateen (which hapned a like to both) they found a safe retreat within the battailes of foote. But when the Armies were come within 500 paces one of another, *Scipio* giuing a signall of Retreat, and opening his battaile, receiued all the horse, and light-armed into the middelt, and diuiding them into two parts, placed them as seconds, behind the wings. Now when time was come to begin the fight, he commanded the Spaniards, who had the middle ward, to march on leasurly, and sent a messenger from the right winge (for hee commanded there) to *Syllanus* and *Marius*, willing them to stretch out the left winge, as they saw him stretch out the right; and to charge the enemy with the light-armed, and horse, before the middle wards might be able to come vp, and ioyne. The wings being thus stretched out, they led with all possible speed three *Cohorts* of foote, and three troupes of horse a peece, against the enemy, besides the light-armed, and those that were receiued into the Reare, who followed a thwart. There was a great empty space in the middelt, because the Ensignes of the Spaniards came slowly on. And now the wings were in fight, when the old souldiers Carthaginians and Africans, the strength of the Armie, were*

no:

not yet come to vse their darts, neither durst they runne into the wings to helpe them, that fought for feare of opening the middelt of the battaile to the enemy, who was coming on against them. The wings were preffed with a double medley. The Horse, light-armed, & *Felices*, wheeling about their Troupes, charge their flanks. The *Cohorts* pushed on in front, to the end, to breake of the wings from the body of the battaile. And the conflict was vnequall both in all other respects, and especially because a rable, as it were of drudges, and vntrained Spaniards, were opposed against the Roman and Latin souldiers. The day being now farre past, the Armie of *Asdruball* oppressed with the mornings tumult, and compelled to take the field, before they had strengthened their bodies with meat, began to faint, and faile in strength; which was the reason that *Scipio* lingered out the day, & made the fight somewhat late. For it was past the seuenth houre, before the wings of foote attached one another: and yet the fight came later to the middle wards. So that the scorching heat of the *south-sunne*, and the labour of standing armed, and hunger, and thirst, first afflicted their bodies, before they came to hands with the enemy. Therefore they stood leaning vpon their Targets, and being weary both in body, and minde, they gaue backe at last; keeping notwithstanding their array no otherwise, than as if the battaile being yet entire, had retreated at the commandment of the Generall. But when the victors, perceiving them to shrink, so much the more eagerly pressed on, the brunt could hardly be indured any longer. And although *Asdruball* restrained, and stopped them, that gaue ground, crying that hills and a safe place of retreat was at their backs, if they could be intreated, to retire easily; yet feare overcoming shame, and the enemy killing them that were next to hand, they forthwith turned their backs, and vniuersally powred out themselves into flight. This stratagem of *Scipio* resteth principally in shifting his best men (the Romans) into the wings; the Spaniards his worst into the middelt, and in keeping the Spaniards aloofe from ioyning; and in hasting to try the day with the Romans against the weakest of the enemy. *Asdrubals* way to meete with this stratagem had bene to counter-march by ranke halfe his Carthaginians, and Africans into one winge, and halfe into the other. And by that means his Spaniards should haue had the middelt against the Roman Spaniards, and his old souldiers Carthaginians and Africans bene opposed in the wings against the Romans, and Latins, and the advantage cluded, that *Scipio* sought.

As the Countermarches by file were of three kinds, so are the Countermarches by ranke; namely the Macedonian, the Lacedemonian, and the Chorean. The Macedonian beginneth to move at the corner of the wing, which is nearest to the enemy, the enemy appearing to either flanks. And therefore inuirteth the same imputation, that was laid vpon the Macedonian countermarch by file; as seeming to runne away, because it diuaceth from the enemy. Yet is there vse of it, as well as of that by file. For by this countermarch you may sit the strongest part of your Armie against the enemy, and apply the weakest to some River, Lake, hill, or such like, so that the enemy can come to incompassse it. It taketh the ground that lieth on the side of the contrary wing. The Lacedemonian taketh the ground that lieth on the side of that wing which is toward the enemy, and bringeth the best men to be foremost against the enemy: And therefore beginneth the moving on the contrary side. The vse of it is, when your forces are such as are able to inuirt the enemy, and you desire to bring your best men to fight. The Chorean keepeth the same ground, the battaile had as yet, & bringeth one wing to possess the place of the other; Or else the Sections to possess the place of the wings, as might haue bene

The Tactics

beene done in the last example cited concerning Scipio and Asdrubal. The manner of countermarch by ranke is contrary to the countermarch by file. In countermarch by file the motion was in the depth of the battaile, and either the front removed toward the reare, or the reare toward the front, and tooke one an others place. In this the motion is in length of the battaile flanke-wise; the wing either marching into the middle, or else cleave thorow to the other wing. In doing it the souldiers, that stand outermost in the flanke of the wing, must move first to the contrary wing, and the rest of every ranke severally follow them in order. The figure will shew the manner of the motion. Patritius utterly mistaketh the countermarch by ranke, and groundeth himselfe upon a wrong principle, namely that in all Countermarches the File-leaders must march toward the reare, and the Bringers-up towards the front. And therefore in changing the wings into Sections, he makes the wings to fall of behind in the reare (the File-leaders wheeling about) and there to ioyne themselves as reare, as the middle Section will give leave, and the Sections falling backe likewise, to ioyne themselves to the flanks of them, that were the wings. Whereas the nature of this Evolution is clearly to leave the File-leaders in front, and Bringers-up in reare, as they were at first. And albeit the File-leaders then change their places, yet change they their place with none, but with File leaders, and the change is, but a change of hands, the right hand for the left, or the left hand for the right. For whereas the File-leaders of the right wing had before the right hand, now in countermarch by ranke, being transposed to the left wing, they have the left hand of all the rest of the File-leaders; as likewise the Bringers-up of the other bringers-up.

The words of Command may be these,

For the Macedonian Countermarch by file.

File-leaders turne your faces about (to the right or left hand).

The rest of every File passe thorow in order one after another, and place your selves at your distances after your Leaders, turning your faces about; and so stand.

For the Lacedemonian Countermarch by file.

The first manner.

Bringers-up, turne your faces about (to the right or left hand.)

The rest turne your faces about and beginning at them, that are next to the Bringers-up, countermarch and place your selves in your distances before the Bringers-up, and one before an other till the File-leaders be first.

The second manner.

File-leaders, countermarch to the right or left hand, and let every mans file follow him, and keepe true distance.

For the Chorian countermarch by file.

File-leaders, countermarch to the place of the Bringers-up, and stand, and let your files follow you keeping their distance.

For the Macedonian countermarch by ranke.

The right or left hand corner file, turne your faces to the right, or left hand.

The rest of each ranke, passe thorough to the right, or left hand, and place your selves orderly behind your side-men keeping your distance.

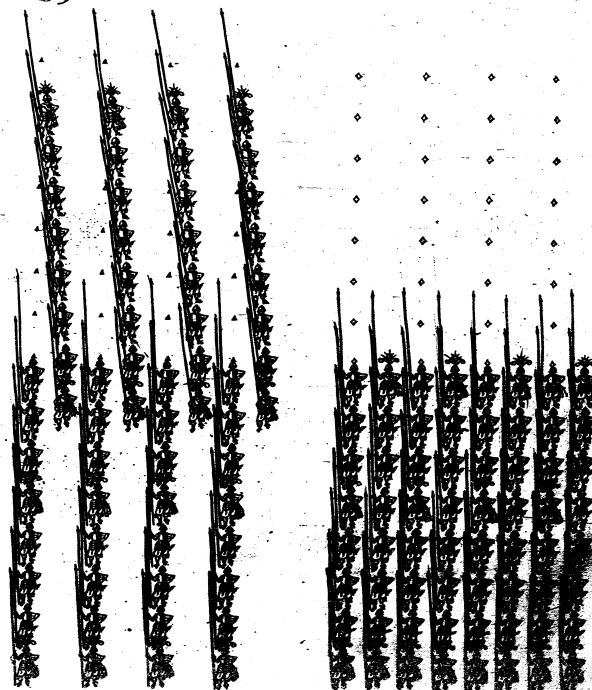
For



The first manner of countermarch by file.

Cap. 29 Dobling of Ranks

Dobling of ranks in action



The first manner of doubling ranks.

For the Lacedemonian countermarch by ranke.

The first manner.

The corner file, where the enemy appeareth, turns your faces to the right or left hand; The rest of each ranke turns your faces, and passe thorough, (to the right or left hand) and place your selves before your side-men orderly keeping your distances.

The second manner.

The right or left wing, where the enemy appeareth not, countermarch to the contrary wings, and all in the Rank follow every man his side-man; keeping your distance.

For the Choræan countermarch by ranke.

The uttermost corner file of the right, or left wing, countermarch into the place of the left or right wing, and stand. And the rest follow ranke-wise keeping their distance.

Of doubling, and the kindes thereof.

CHAP. XXIX.

THere are two kinds of doubling, one of *Ranks*, the other of *Depth*, of *files*: and ² either of these double the number, or the place. ³ The length is doubled in number when of a front of 124 files we make a front (keeping the same ground) of 248 files, by inserting in the spaces betwixt file and file, some of the followers, that stood in the depth. This is done to the end to thicken the length of the battaile. If we list to recall them to their first *posture*, we are to command those, that were inserted, to *countermarch* to the place, they had before.

⁴ There are, that mislike these *doublings*, especially the enemy being at hand; and would have a shew of doubling made, without indeed doubling the *Phalange* already ordered, by stretching out the *light-armed*, and the *Horse*, on both sides of the *wings* of the *Battaile*. ⁵ The use of doubling the length is, when either we would *over-wing* the enemy, or else our selves feare to be *over-winged*.

The *Depth* is doubled ⁶ by inserting the second file into the first; so that the *Leader* of the second file be placed next behind the *Leader* of the first file, and the second man of the second file be the fourth man of the first file, and the third man of the second file be the sixth in the first file, and so forth the rest, till the whole second file be ingrossed into the first; and likewise the fourth file into the third, and all the even files into the odde.

Doubling of the Depth by Countermarch is made, either when the next *side files* in severall [as in the former example the second, and the fourth, and the rest of the even files] *countermarch* to the *Rear*, and place themselves behind the *Bringers-up* of the odde files; or else the files remayning in their first place, and number, halfe of them, dividing themselves from the other halfe, *countermarch* likewise to the *Rear*, and conveying themselves behind the other, there order themselves, and so double the depth of the *Phalange*.

If we would returne them to the first *posture*, we must recall those, that were conveyed to stand behind, to the place they had before the *Countermarch*.

THE former three Motions alter not the forme of the Phalange. For whether you turned faces, wheeled, or counter-marched the Phalange, the depth and length remain one. The motion to be expressed in this Chapter induceth an other shape to the Phalange; and maketh it seeme a different body from that it was before, being by Doubling extended either in length or in depth. For Doubling the number of men, or the place of the Phalange in front, maketh the length twice as much, and doubling the same in flank maketh the depth double to that it was before. For Doubling is nothing else, than making a military body twice as long, or twice as deepe, as it was before.

1 There are two kinds of doubling. The Doublings are either of length or depth; Or (which is all one as Suidas saith) of ranks or files. For ranks stretch out in length, files in depth. And these againe are divided into two other kinds, the body being

2 Doubled in number or place. That which is here called number, is called elsewhere persons; or (by Suidas) men. It is called persons in the Insertion which is made to Aelian, I know not by whom in the precedent Chapter of Countermarches. Which because it lay thrust in betwixt the description of Countermarches, and nothing pertained to that argument, I neuer made doubt, was crept into the text. And I am rather confirmed in my opinion, because I saw it noted with an Alteriske in that Aelian (being of Robertellus Edition) which the learned Isaac Casaubon had quoted, and purposed to set forth, if continually d'ath had not prevented him. I will here set downe the words, because they differ not much from Aelian, and may give some light to the manner of Doubling. It is to be understood (so are the words) that a Phalange is doubled in persons, or place, when we therefore take halfe the souldiers from the Depth, and making files of them, place them euen with the rest in length of the front, so that of 124 files we make 248, this is Doubling of persons. In like sort we double the place with 124 files (not increasing the number) but onely commanding some to turne to the Pike, some to the Target, till the Phalange be stretched out to a convenient length; as from 5 furlongs to 10. In the same manner is the depth doubled. For either one file is inserted into an other, man for man, so that the second File-leader becomes the follower of the first, and the second man in the second file, the follower of the second in the first file, and so thereto: Or else 16 men are extended, that they hold as much ground in length, as 32 usually do. So farre the insertion. It followeth in Aelian.

3 The length is doubled in number. When the front hath twice as many files, as it had before, this is Doubling in number, or in men, or in persons. For the persons, or men, make the number in the files. And the files carrying an euen depth of men, and being doubled, double the number of the front, or length. Aelian speaketh but of one kinde of doubling, namely of number, and that must be done in open order, as I said before. For the files of 16 standing in open order if you command the Middlemen (as we terme them at this day, they were called in the Macedonian files the third Enomotarches) to double their ranks: The first middle men with the hinder halfe file march up to the front, & so doubling the front in number leaue yet the same measure of length. The figure sheweth how it is done. Yet are there two other waies, when the Phalange standeth in close order, both which double the number, and place. One is when the Middlemen divide themselves, and one halfe with their followers turning their faces march out of the right flank: The other of the left flank of the Phalange. And then turning their faces againe, the

fluece

fluece up and ioine themselves in an euen line with the File leaders in front; The other when all the Middle turne their faces one way and march out with the followers beyond one flank right or left; and turning faces againe fluece up to the front, and ita euen with the File-leaders. One of these is done, when we desire to enlarge both the wings of the Phalange; the other, when but one wing. Of these two last waies, I haue set downe no figure, because I finde them not expressed in Aelian. n Pohlenius tells the story thus: n Pohlenius a. in Cleandridas. s. 4.

Cleandridas making waie vpon the Thuriens, having halfe as many men againe, as they, conceiuing if they had intelligence hereof, they would hardly bee brought to fight, imbrattailing his Phalange, stretched it out in depth. The Lucians therefore, contemning the small number, drew out their forces in length, with intent to ouer-front the enemy; which Cleandridas perceiving, commanded the followers to march up, and ranke with their Leaders; and by that means increased the length of his Phalange, and ouer-fronted the enemy; who being incompassed, and assailed with misse weapons on all hands perished intirely, excepting a few, that saued themselves by shamefull flight. The words seeme obscure to a man not acquainted with the Tactics. There are two kinde of soldiers saith Aelian in a file, Leaders, and followers. All the Leaders are the oade of the file; as the first, the 3, the 5, the 7, and so forth: the followers are the euen, as the 2, 4, 6, 8. Those that are in the same ranke, are called side-men. Now, saith Pohlen, Cleandridas willed the followers to step forward, and to ranke, and become side-men with their Leaders: that is, he willed the euen files to double their ranks with the oade, & so extenuated the depth, but increased the length of his Phalange; by which way he ouer-fronted, & inclosed the enemy on all sides. This way then to double ranks, or the length of the battaile, is to insert the euen ranks man by man into the oade. All the Doublings that haue beene rehearsed, were Doublings either in number alone, or else both in number, and place. For doubling of place alone nothing is said to Aelian. The Insertion I rectified, supplyeth this defect: saying, the place is doubled with 124 files, onely by commanding halfe to turne to the Pike, halfe to the Target, till the Phalange be stretched to a convenient length; as from 5 furlongs to ten; which is as much to say in few words, as to open the Phalange; Or to bring it from order, to open order. For so the front possesseth double ground, to that it had before.

4 The vse of Doubling the length is. Two causes are assigned for the doubling of the length: 1 One to ouerwing the enemy, the other to auoide ouerwinging our selves. Cleandridas in the example above, performed both: For he both disappointed the Lucians that sought to incompass him, and besides incompassed, and inclosed them. The narrower the front is, it is the more in danger of ouer-fronting; & being drawne out in length it is freer from encompassing, because a greater compass must be stretched before it can be inclosed. Yet are we to take heed, that in doubling of the front, we giue it not so much length that it faile in depth. The want of length, or depth is alke dangerous, and giueth advantage to the enemy. I haue touched before, and quoted Leo glancing onely at his words. Now I will set them downe as they lie. 4 When the thickness of the Phalange (saith he) is gathered vp and made more thinn, it becometh not so to lengthen it, that it become altogether weak and without depth. For it will lo come to passe, that the enemy shall easily cut it in peeces, and make a passage thorough it, and not onely seeke to incompass it before, but passing thorough the midst, bee found behinde, and there in damage it. And this it behooueth a Generall, not onely to take heed, hee suffer not himselfe, but also inuicour to put vpon his enemy.

i Leo cap. 7.
69.k Polyin. l. b. 4
in Antiqu. 1010.
5. 19.

Hitherto are the words of Leo: shewing the disadvantage of a battaile too much thinned by doubling the length. But ⁱ Leo elsewhere addeth an other cause of doubling, namely to make inew a faire fight of the Armie. For the more ground it taketh in front, the more will the number appeare, and the braverie of every man in particular discovered. Further Antigonus cyled also this doubling for a policie to beguile his enemy. ^k Polien repeateth the fact thus: Antigonus incamped against Eumenes with an armie inferior in number. And when messengers were sent from one to another, Antigonus at the receipt of a messenger of the enemy, commanded one of his souldiers to come running in, as it were out of breath, and all to be filled with dust, and to bring news that his Confederates were come. Antigonus hearing the newes, leaped for joy, and sent away the messenger. The next day he led his Armie out of his trench, doubling the length of his front. When the enemy heard of their messenger the newes, that was brought to Antigonus concerning his Confederates, and saw the length of his battaile doubled, they imagined that the depth was answerable to the front. And therefore they dislodged being afraid to ioyne with him.

5 There are that mist. ke] Countermarch, and Elians doublings of number, are dangerous to the enemy being ready to charge. Because the files of the Battaille must be kept in open Order till the motions be ended, which posture is not fit to receive the charge of the enemy, as we saw out of the eleventh Chapter. The other two doublings are done in close order, whereof I made mention a little before. The one dividing the middle men in halfe, and shewing them up by the battaile on both sides. The other shewing them upon one side which you will, may be used without danger, as well when the enemy is neare, as when the fight is: in as much, as they disturbe not the battaile, but advance fresh aides against the enemy on the flanks of it.

6 By inserting the second file] There are two manner of doublings of the depth or of files; one in number, the other in place. In number, when one file is inserted into another, the Leader or first man of the second file standing behind the Leader of the first; the second behind the second, the third behind the third, and so forth of the rest: Or when the even files countermarch, and their Leaders place themselves behind the Bringers-up of the odde, their files following them; or (which cometh all to one) the files being whole, they divide themselves into two parts in the front, and halfe countermarch, and place themselves in the Rear of the other file to file: albeit the two last are Doublings both in number and place, and not in place alone. The true Doubling of the place alone is not Elian. The Insertion whereof I spake, remedieth this defect also. There it is said, that when 16 men (that is a file) are so extended, that they possesse as much length as 32 should doe, (that is, as 2 files) it is doubling of place, which is nothing else but changing of the Souldiers order into open order. For in their order they have 48 foote in depth, in their open order 96 foote in depth. In this Doubling of depth we must take heed that we make not the front of our Armie to narrow itself we give opportunity to the enemy to insurle, and compass it. Polybius noteth this a great fault in Marcus Atilius Regulus, at such time as he fought with the Carthaginians, and was taken prisoner. His words have this effect: ^k The Romans seeing the enemy order his battaile marched out against him full of courage. Being notwithstanding somewhat appalled at, and foreseeing the Elephants violence in coming on, they set their Darters before, and placed many maniples of armed behind, one after another, and divided the Horse halfe into one wing, halfe into the other. Then making the whole battaile shorter, but deeper, then they were wont, they provided well against the Elephants, but not against the Horse, that farre exceeded them in

l To Polyb. l.

in number. Being now come to hands the Roman horse overpressed with multitude of the Carthaginians quickly fled from either wing. But the foote of the left wing, partly avoyding the Elephants, partly contemning the Mercenaries, fell on, and charged the right wing of the Carthaginians, and putting it to flight, followed hard, and gave chase even to the trench. But of those, that were placed against the Elephants, the first sinking vnder the violence of the beasts, perished being overthrown, and troden to death by heapes. The body of the battaile remained a while vnbroken by reason of the depth of them, that were after placed. But when the Rear of all, incompassed by the horse, was forced to turne about, and fight with them; and the other that had by force made way thorough the middle of the Elephants, and were now behind their backs, came vp to the fresh Phalange of the Carthaginians, standing in good order, they were by them slaine. Thus fortune being contrary on all sides, the Romans for the most part were troden to death by the excessive might of the beasts, and the rest died with the darts of the horsemen in the place, where they fought. The error of Atrilius Regulus was in ordering his battaile too deepe; by means whereof it was easily incompassed, and distressed by the Carthaginian horse. ^m Appian likewise blameth Antiochus for ordering his Phalange 32 men in depth, where the Macedonian Phalange ought to but 16 deepe, ⁿ syxtacts 107. B. proving that by that oversight it was incompassed by the Romans, and overthrowne. I have touched the historie in my notes before. Many other examples might be alledged, but these two are sufficient for our purpose.

The words of Command in doubling of the length by number.

Middle men double your Ranks to the right, or left hand.

By this Command the middle men with their halfe files march up to the front, in the spaces betwixt the files, and stand even with the File-leaders, and the rest even with the rest of the Ranks.

Doubling of the length in place.

Stand in your open order.

One halfe openeth their files to the right hand, the other to the left, and stand six foote one from an other.

Doubling of the depth in number.

Double your files to the right or left hand.

The even files fall into the spaces of the odde files.

Double your files by countermarch to the right or left hand.

The even files countermarch, and fall behind the Rear of the odde, and place themselves locally after them, observing their first distances.

Divide your files and double them by countermarch to the right, or left hand.

Halfe the files divide themselves from the other halfe, and countermarch out behind the Rear, then turne their faces towards the place behind the Rear of the standing files, which remoued not; then march on, and place themselves orderly behind them file to file, then turne their faces, as at first.

Doubling the depth in place.

Ranks open behind to your open order.

The broad front'd Phalange, the deep Phalange, or Herse, and the vneuen-fronted Phalange.

CHAP. XXX.

P*lagiophalanx*, or the *broad fronted Phalange*, is that, which hath the length much exceeding the depth.

Orthiophalanx, or the *deep Phalange* (commonly called the *Herse*) is that, which proceedeth by *wing* hauing the depth much exceeding the length. In generall speach euery thing is called *Paramikes*, which hath length more then the depth; and that which hath the depth more, then the length, *Orthion*: and so likewise a *Phalange*.

The *Phalange Loxe*, or *vneuen fronted*, is that, which putteth forth one of the *wings* (which is thought fittest) toward the enemy, and with it beginning the *fight*, holdeth off the other in a convenient distance, till oportunitie bee to advance

Of Parembole, Protaxis, Epitaxis, Proffaxis, Eutaxis, & Hypotaxis.

CHAP. XXXI.

P*arembole*, or *infrision* is, when placing souldiers before we take off the hindmost, and ranke them within the distances of the first.

Protaxis, or *fore-fronting* is when we place the *light-armed* before the *front* of the *armed*, and make them *fore-flanders*, as the *File-leaders* are.

When we place the *light-armed* behind, it is called *Epitaxis*, as it were an *after-placing*.

Proffaxis, or *adiouning* is, when to both flanks of the *battaile*, or to one flanke, some part of the hindmost is added, the front of them, that are added, lying euen with the front of the *battaile*; such addition is called *Proffaxis*.

Eutaxis, or *infrision*, is when it seemeth good to set the *light-armed* within the spaces of the files of the *Phalange* man to man.

Hypotaxis, or *Double-winging*, is when you bestow the *light-armed* vnder the wings of the *Phalange*, placing them in an embowed forme; so that the whole figure resembleth a three-fold gate, or doore.

How the motions of wheeling, double, and treble wheeling of the battaile are to be made.

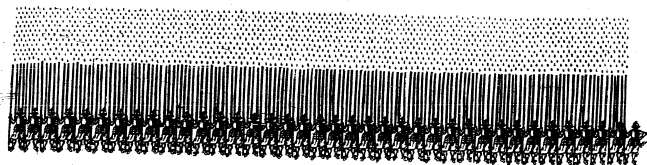
CHAP. XXXII.

IT followeth to shew how a *battaile* may be turned or wheeled, and how after reduced to the first posture, or *Station*.

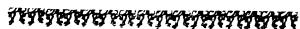
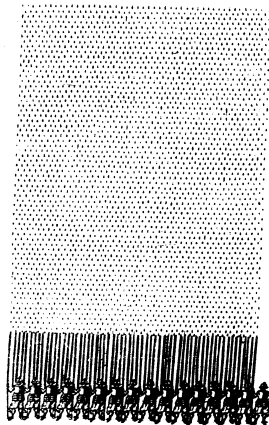
When therefore wee would accustome our *Troupes* to wheele the *battaile* to the

Plagiophalanx or the Brode-Fronted Phalange

Cap. 30



Orthiophalanx or the Herse



Proffaxis, or fore-fronting

The Front

...or Horse, and the

...that, which hath the length
...ed the *Horse*) is that, which
...ing the length. In general
...ngth more then the depth;
...a, *Orthion*: and so likewise a
...ch putteth forth one of the
..., and with it beginning the
...ce, till oportunitie bee to

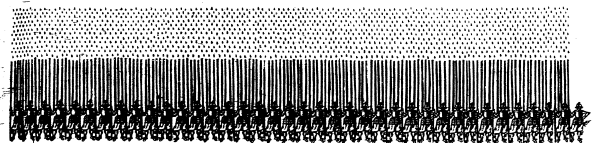
...axis, *Eutaxis*,

...before we take off the hind-
...front.
...the armed before the *front* of
...ders are.
...d *Eutaxis*, as it were an after-
...battaile, or to one flanke, some
...are added, lying even with
...axis.
...the light-armed within the
...the light-armed vnder the
...forme; so that the whole fi-

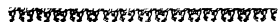
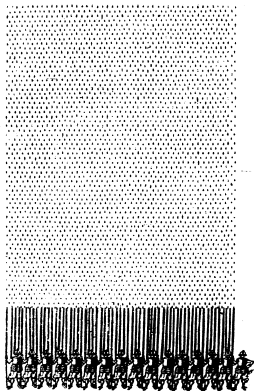
...reble wheeling

...or wheeled, and how after
...pes to wheele the battaile to
...the

*Phagobalanx or the Brode-fronted
Phalange*



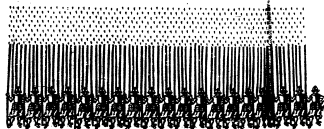
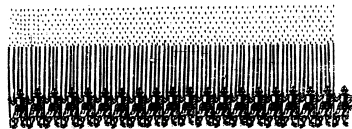
Orthobalanx or the Horse



Process or fire-fronting

Cap. 30.

*Leobalanx or the uneven-fronted
Phalange*



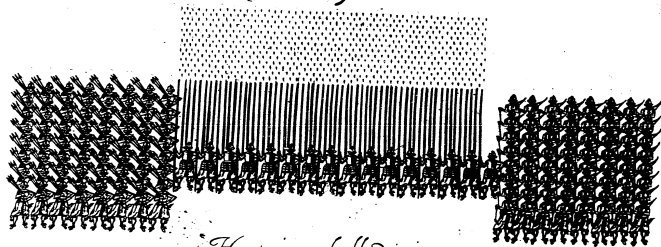
The Front

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Orthiop
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and that u
Phalange
The *Ph*
wings (wt
fight, hok
advance

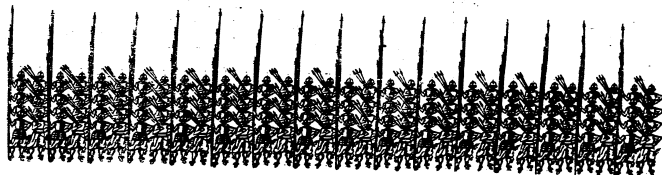
P *Arce*
moß.
Protax
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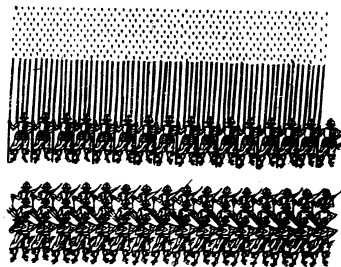
Cap. 31



Hypotaxis, or double-winging



Entaxis, or insertion



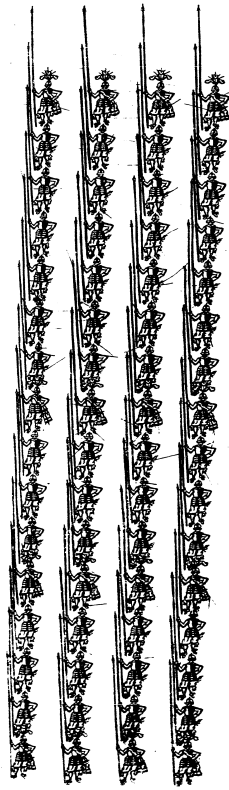
Protaxis, or forefronting

Cap. 32.

The manner of wheeling

The first posture

Closing of files



The Front

Closing of ranks forward



the right hand, we command the right-hand-file to stand firme, & the rest of the file to turne their faces to the right hand, and to moue close vp to the right hand file. Then to turne their faces, as they were at first: Then the hinder ranks to close forward: Then the whole battaile in that closeneſſe to wheele about the corner-file-Leader to the right hand. This done, if neede be to reduce it to the first posture, or Station, we command euery man to turne about his face to the Target, or left hand (that is to looke the contrary way) Then to wheele about the body, that is, as it turned, cloted, & ferred with the front to the right hand so to returne it againe to the place, from whence it made the wheeling; Then the file-Leaders to stand firme, and the rest to open their ranks behind; Then to turn their faces about, as they stood at first; Then the right-hand-file to stand fast, and the rest turning faces to the left hand to open their files; Then to stand; And lastly to turne their faces againe to the right hand: and so shall euery man haue his first posture.

But in case we desire to wheele to the left hand, we command the left-hand-file to stand still, and all the rest to turne their faces to the left hand, and moue forward close vp to the left hand file; Then to turne their faces as they were; Then to gather vp the hinder ranks; Then to wheele the battaile to the left hand, and stand: and so is it done, that was commanded. But if restitution to the first posture be needfull, we must doe, as we did in returning from the right. For euery man must turne about his face to the Pike; Then the whole battaile wheeling about the left-hand-corner-file-Leader must returne to the place, it had; Then all the file-Leaders stand firme, and turne about their faces, and the rest open their ranks in mouing forward and make Alce; Then the left hand file is to stand firme (for it hath the place it first had) and the rest turning their faces to the right hand to open their files, and moue forward, till they haue recovered their first distances; then to turne their faces as at first; and so shall euery man be in his first posture. Now if we would wheele the battaile about, to the pike we are to make 2 wheelings to the same side, so will it come to passe that the file-Leaders shall in the change haue their faces turned to the Reare, where before they had them looking out from the front. But in restoring to the first posture we command it to wheele about to the right hand; That is, we giue it two wheelings more the same way; So the file-Leaders will haue their faces set, as at first. Then we command the file-Leaders to stand firme, and the rest to open their ranks behind; then to turne their faces about; Then the right hand file to stand still (for it hath the right place) and the rest turning their faces to the right hand to march on, till the former distances are regained; then to make Alce. So is the battaile reduced to the first Station.

If you would haue the battaile turne about to the Target, you are to giue contrarie directions; That is, in stead of commanding a double wheeling to the Pike, to command a double wheeling to the Target; Then by making two turnes the contrary way, to vsethe like changes, we speake of before.

There is likewise a treble wheeling of the battaile, when it turneth thrice to the same hand, namely to the Pike, or Target. The double wheeling to the Pike transferreth the Souldiers face from the front to the backe of the battaile: The treble wheeling to the Pike bringeth his face to the left flank. The treble wheeling to the Target contrariwise to the right flank.

The Tactics

Notes.

Before in the 26 Chapter Aelian discoursed of wheeling, and the kindes thereof. The manner, how it is to be done, is referred for this place, I neede not therefore remember any thing else, besides the words of command.

The words of command in Epistrophe.

*The uttermost file on the right or left hand stand firme
The rest turne faces (to the side purposed) and march up to the file standing firme.
Faces as you were.
Close your ranks forward:
Wheele the body (to the hand appointed) and when you haue your ground, stand.*

Returning to the first Posture, or Anastrophe.

*Faces to the right or left hand
Wheele backe the body to the ground, it first had.
File- Leaders stand firme: the other ranks open to their first place.
Faces about (to which hand you will)
The corner file (to which the turning was) stand firme, the rest open to their first ground.
Faces as you were, and order your Pikes.*

Peripasmos, or wheeling about.

*In wheeling about, the same wordes to close the files, and ranks, are so be used, which were used in Epistrophe, there remaineth no more, then so say
Wheele about your body, to the right, or left hand.*

Anastrophe or returning to the first Posture.

*Returne to your first Posture.
The same forme is used, that was held in the former returning unto the first posture for opening ranks and files.*

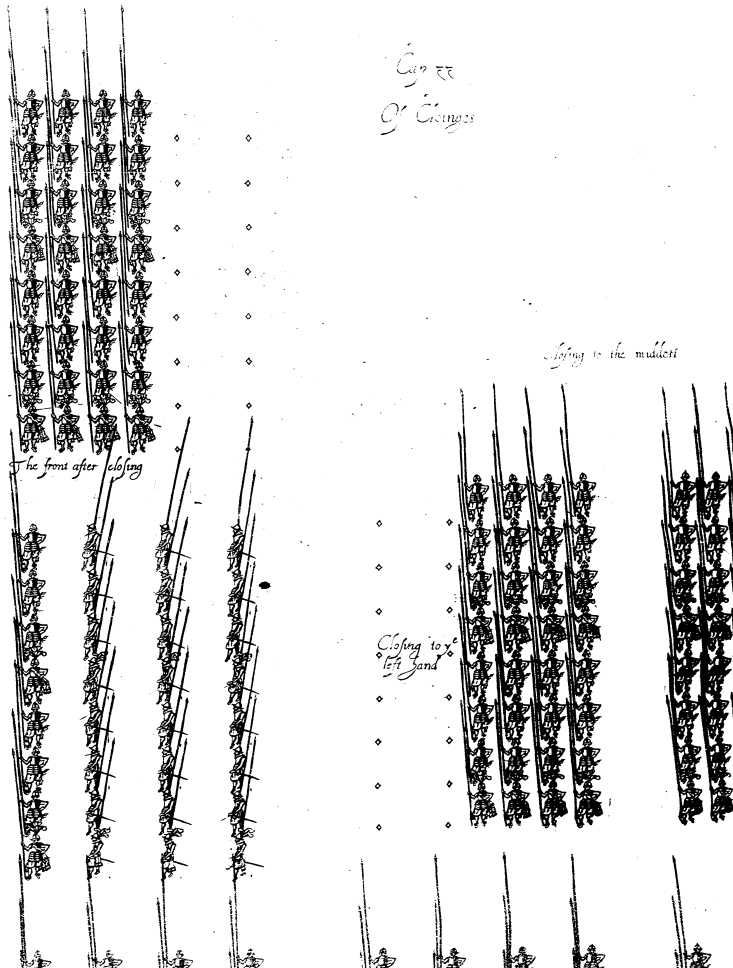
Eperipasmos, or treble wheeling.

In this motion the same course is held, that was in the wheeling; But only that you command a treble wheeling. And the returning to the first Posture, or Anastrophe is all one, but for the same difference.

*Of closing the battaile to the right, or left hand,
or to the middle.*

CHAP. XXXIII.

IF we would close, or thicken the Phalange in the right wing, we are to command the right-wing-corner-file to stand still, and the rest turning faces to the Pike to advance toward the right hand; Then to set their faces as they were, and to gather up the ranks behinde. In reducing them to the first posture we are to command the file-Leaders to stand, and the rest turning about their faces to open their



The Tactics

Notes.

Before in the 26 Chapter Elian discoursed of wheeling, and the kindes thereof. The manner, how it is to be done, is referred for this place, I neede not therefore remember any thing else, besides the words of command.

The words of command in Epistrophe.

The uttermost file on the right or left hand stand firme.
The rest turne faces (to the side purposed) and march up to the file standing firme.

Faces as you were.

Close your ranks forward:

Wheele the body (to the hand appointed) and when you have your ground, stand.

Returning to the first Posture, or Anastrophic.

Faces to the right or left hand

Wheele backe the body to the ground, if first had.

File- Leaders stand firme: the other ranks open to their first place.

Faces about (to which hand you will)

The corner file (to which the turning was) stand firme, the rest open to their first ground.

Faces as you were, and order your Pikes.

Peripasma, or wheeling about.

In wheeling about, the same wordes to close the files, and ranks, are to be used, which were used in Epistrophe, there remaineth no more, then to say
Wheele about your body, to the right, or left hand.

Anastrophic or returning to the first Posture.

Returne to your first Posture.

The same forme is used, that was held in the former returning unto the first posture for opening ranks and files.

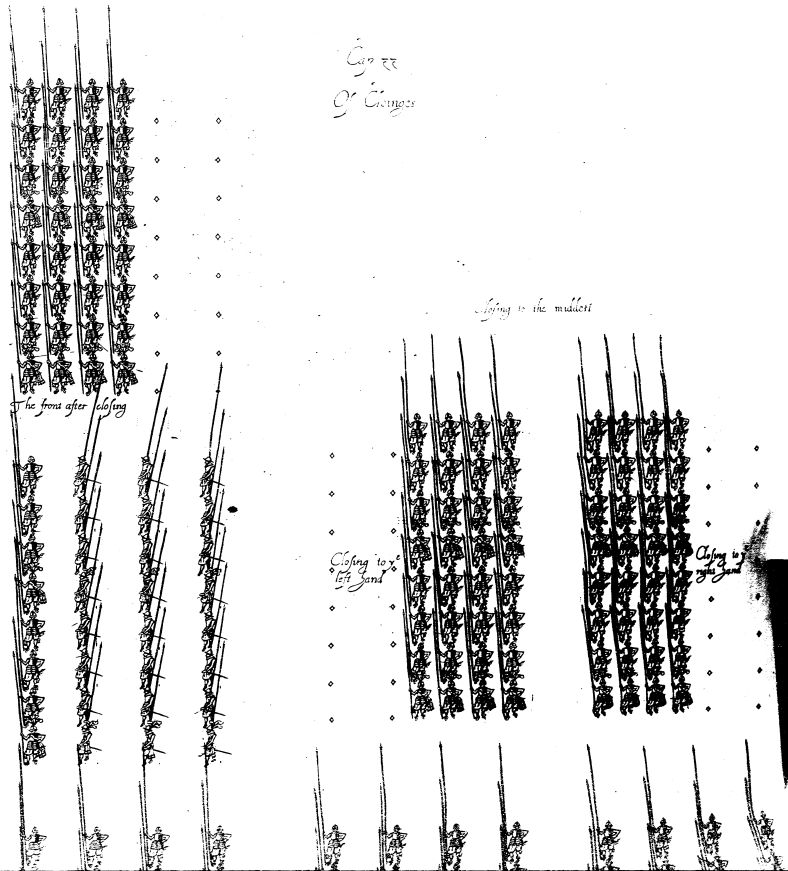
Eperipasma, or treble wheeling.

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Of closing the battaile to the right, or left hand,
or to the middle.

CHAP. XXXIII.

If we would close, or thicken the Phalange in the right wing, we are to command the right-wing-corner-file to stand still, and the rest turning faces to the Pike to advance toward the right hand; Then to set their faces as they were, and to gather up the ranks behinde. In reducing them to the first posture we are to command the file- Leaders to stand, and the rest turning about their faces to open their



Here I turne faces (to the side purposed, and march up to the first rank) as this
 Faces as you were.
 Close your ranks forward:
 wheele the body (to the hand appointed) and when you have your ground stand.

Returning to the first Posture, or Anastrophe.

Faces to the right or left hand
 Wheele backe the body to the ground, it first had.
 File- Leaders stand firme: the other ranks open to their first place.
 Faces about (to which hand you will)
 The corner file (to which the turning was) stand firme, the rest open to their first ground.
 Faces as you were, and order your Pike.

Petispasmos, or wheeling about.

In wheeling about, the same wordes to close the files, and ranks, are to be
 used, which were used in Epistrophe, there remaineth no more, then to say
 Wheele about your body, to the right, or left hand.

Anastrophe or returning to the first Posture.

Returne to your first Posture.
 The same forme is used, that was held in the former returning unto the first
 posture for opening ranks and files.

Epetispasmos, or treble wheeling.

In this motion the same course is held, that was in the wheeling; But only that
 you command a treble wheeling. And the returning to the first Posture, or
 Anastrophe is all one, but for the same difference.

Of closing the battaile to the right, or left hand,
 or to the middle it.

CHAP. XXXIII.

IF we would close, or thicken the Phalange in the right wing, we are to command
 the right wing, corner-file to stand still, and the rest turning faces to the Pike to
 advance toward the right hand; Then to set their faces as they were, and to ga-
 ther vp the ranks behinde. In reducing them to the first posture we are to com-
 mand the file-Leaders to stand, and the rest turning about their faces to open
 their

The front after closing

Closing to the
 right hand
 and in action

Closing to the
 left hand

Closing to the
 right hand

The front before closing

The front of the battaile before closing

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the file-Leaders to stand, and the rest turning about their faces to open their

their ranks behind; Then to turne their faces as they were; Then the right-wing, corner-file to stand (for it hath the right place already) and the rest proceeding on to the Target to follow their Leaders, and observing their distances to turne their faces as at first. A contrarie course is to be held in thickning the Phalange to the left wing.

If the Phalange be to be closed in the midst, the *Diphlange* on the right hand must turne their faces toward the Target, and the *Diphlange* on the left hand their faces toward the Pike; Then move forward toward the midst of the Phalanges; Then, after their true distance gained, to set their faces, as they were, and to gather up the Ranks behind.

When we would reduce the Phalange to the first posture, we command to turne faces about; then to open the Ranks, and all to move on, but the first Rank; then to turne their faces againe, and the right *Diphlange* turning to the Pike, and the left *Diphlange* to the Target to follow their Leaders, till they have recovered their first distances. Then to set their faces, as they were.

This rule is to be observed in all turnings about of faces, when they are made out of closings, that the Pikes be advanced, least they hinder the Souldier in making his turning.

The light-armed are to be taught, and exercised after the same manner.

Notes.

In the 11 Chapter the distances, that ought to be betwixt souldier and souldier, are particularly treated of. This Chapter sheweth, how they are to be gained, that is, how we are to proceede out of one distance into another. And because the open order is, that is commonly begunne withall, it is here taught how from thence to passe to the rest, and to returne to it againe. The end of closings is spoken of before. In regard of place they are said to be of two kinds: One to the wing (right or left) the other to the middle of the Phalange. I cannot expresse the manner better, then by setting downe the wordes of command, or direction, which are these in

Closing to the right wing.

The right-wing, corner-file stand firme

The rest turne faces to the Pike, and move (according to the distance required) to the right hand.

Faces, as you were.

Close your hinder ranks forward, and order your Pikes.

Restoring to the first posture.

File-Leaders stand firme.

The other Ranks, turne faces about, and open behinde to the first distance.

Faces as you were.

The right-wing, corner-file stand firme; the rest turne faces to the Target, and proceede to your first distance.

Faces as you were; and order your Pikes.

Closing to the left wing.

It differeth not from the other, but that the moving is to the contrarie hand.

Closing

The Tallicks

Cloſing to the middeſt of the Battaile.

The right-wing turne faces to the Target, the left to the Pike.
Each moue vp to the middeſt of the Phalange, and ſtand at the diſtance named.

Faces as you were.

Cloſe the hinder ranks forward, and order your Pikes.

Reſtoring to the firſt Poſture.

The firſt ranke ſtand firme.

The reſt turne faces about, and open the ranks to the firſt diſtance.

Faces as you were.

The files next the middle ſection ſtand faſt, and the right wing turne faces to the Target, the left to the Pike, and moue on till the firſt diſtance recovered.

Faces as you were, and order the Pikes.

We may not forget Elians generall rule for turning of faces out of Cloſings, that the Pikes be alwaies advanced. For when you come vp to the cloſeneſſe required, the Pike upon the ſhoulder will hardly admit turning of the face. The like falleth out when you would open from the Cloſing.

The uſe, and advantage of theſe exerciſes
of armes.

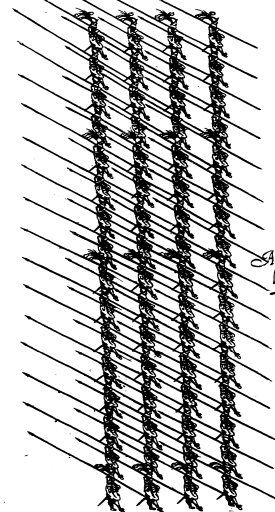
CHAP. XXIV.

THEſe precepts of turning about of faces, of wheeling, and double wheeling of the Battaile, and of reducing it to the firſt poſture, are of great uſe in ſuddaine approaches of the enemy, whether hee ſlew himſelfe on the right, or left hand, or in front, or in the reare of our march. The like may bee ſaid of Counter-marches; Of which, the Macedonians are held to bee the inventors of the Macedonian; the Lacedemonians of the Lacedemonian; and for this cauſe either to haue name accordingly. The Hiſtories witneſſe, that Philip (who much enlarged the Macedonian kingdome, and overcame the Grecians in battaile at Cheronea, and made himſelfe General of Greece) and likewiſe his ſonne Alexander (that in ſhort time conquered all Aſia) made ſmall account of the Macedonian countermarch, vntill neceſſitie forced it; and that they both by the uſe of the Lacedemonian became victorious over their enemies. For the Macedonian countermarch the enemy falling vpon the reare, is cauſe of great confuſion; in as much as the hinder moſt diſmarching toward the front, and making a ſhew of running away, it more emboldneth the enemy to follow. For feare, and purſuit of the enemy [ordinarily] accompanieth that kinde of countermarch. But the Lacedemonian is of contrarie effect. For when the enemy ſheweth himſelfe in the reare, the Leaders with their followers brauely aduancing, and oppoſing themſelues, it ſtriketh no ſmall feare, and terror into their minde.

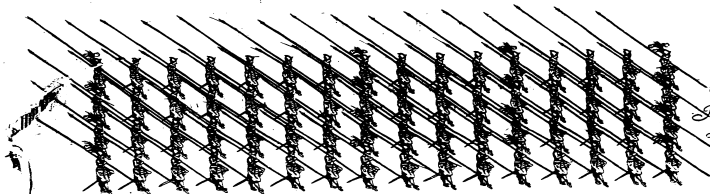
CHAP.

Cap. 30.

The File-leaders



A Deduction to the
left hand



A right induction
The Front

The first rancke stand firme.

The right turne faces about, and open the ranks to the first distance.

Faces as you were.

The files next the middle section stand fast, and the right wing turne faces to the Target, the left to the Pike, and move on till the first distance recovered.

Faces as you were, and order the Pikes.

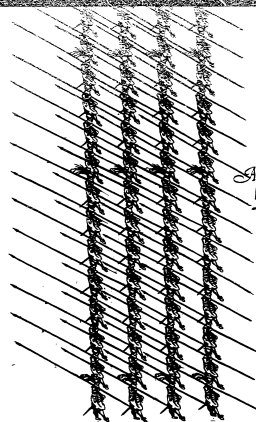
We may not forget Elians generall rule for turning of faces out of Closings; that the Pikes be alwaies advanced. For when you come up to the closings required, the Pike upon the shoulder will hardly admit turning of the face. The like saileth out when you would open from the Closing.

*The use, and advantage of these exercises
of armes.*

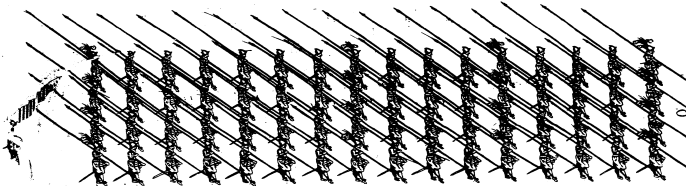
CHAP. XXXIV.

THese precepts of turning about of faces, of wheeling, and double wheeling of the Battaille, and of reducing it to the first posture, are of great use in suddaine approaches of the enemy, whether hee shew himselfe on the right, or left hand, or in front, or in the reare of our march. The like may bee said of *Counter-marches*; Of which, the *Macedonians* are held to bee the inventors of the *Macedonian*; the *Lacedemonians* of the *Lacedemonian*; and for this cause either to haue name accordingly. The Histories witnesse, that *Philip* (who much enlarged the *Macedonian* kingdome, and overcame the *Gracians* in battaile at *Cheronea*, and made himselfe Generall of *Greece*) and likewise his sonne *Alexander* (that in short time conquered all *Asia*) made small account of the *Macedonian* countermarch, vntil hee necessitie forced it; and that they both by the use of the *Lacedemonian* became victorious over their enemies. For the *Macedonian* countermarch the enemy falling vpon the reare, is cause of great confusion; in as much as the hindermost dismarching toward the front, and making a shew of running away, it more encourageth, and emboldneth the enemy to follow. For feare, and pursuit of the enemy [ordinarily] accompanieth that kinde of *countermarch*. But the *Lacedemonian* is of contrarie effect. For when the enemy sheweth himselfe in the reare, the Leaders with their followers brauely aduancing, and opposing themselves, it striketh no small feare, and terror into their minds.

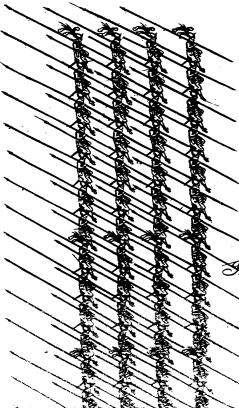
CHAP.



*A Deduction to the
left hand*



*A right reduction
The Front*



*A Deduction to the
right hand*

*Of the signes of direction, that are to be given to the
armie, and their severall kindes.*

CHAP. XXXV.

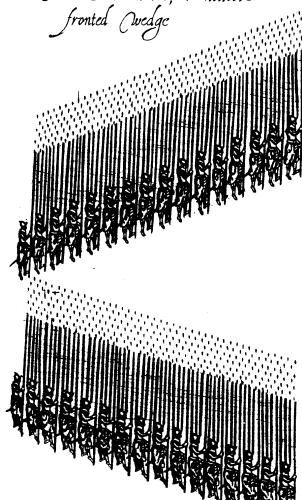
WE are to acquaint our forces both foote, and horse, partly with the voice, and partly with visible signes, that whatsoever is fitting be executed, and done, as occasion shall require. Some things also are to be denounced by the Trumpet, for so all directions will be fully accomplished, and sort to a desired effect. The signes therefore, which are delivered by voice, are most evident, and cleere, if they have no impediment. But the most certaine, and least tumultuous are such, as are presented to the eye, if they be not obscured. The voice

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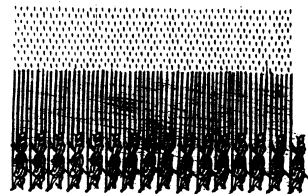
Al. C.

Cap. 36.

*The Coelembolos, or hollow.
fronted Wedge*



The right Induction



The front

*Of the signes of direction, that are to be given to the
armie, and their severall kindes.*

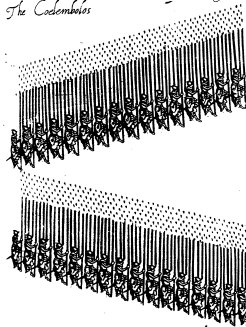
CHAP. XXXV.

WE are to acquaint our forces both foote, and horse, partly with the voice, and partly with visible signes, that whatsoever is fitting be executed, and done, as occasion shall require. Some things also are to be denounced by the Trumpet, for so all directions will be fully accomplished, and fort to a desired effect. The signes therefore, which are deliuered by voice, are most euident, and cleere, if they haue no impediment. But the most certaine, and least tumultu-
ous are such, as are presented to the eye, if they be well ordered. The

Cap. 36.

The Cohort

The left wing



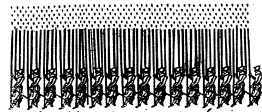
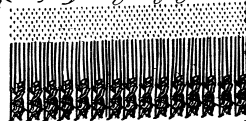
The right wing

The front

*The Phalange set against of left wing
of Cohort*



The forbearing Phalange



*The Phalange set against of right wing
of Cohort*

*Of the signes of direction, that are to be given to the
armie, and their severall kindes.*

CHAP. XXXV.

WE are to acquaint our forces both foote, and horse, partly with the voice, and partly with visible signes, that whatsoever is fitting be executed, and done, as occasion shall require. Some things also are to be denounced by the Trumpet, for so all directions will be fully accomplished, and sort to a desired effect. The signes therefore, which are delivered by voice, are most euident, and cleere, if they haue no impediment. But the most certaine, and least tumultuous, are such, as are presented to the eye, if they bee not obscured. The voice sometime can hardly be heard by reason of the clashing of armour, or trampling, and neighing of Horses, or tumult of cariage, or noyle, and confused sounds of the multitude. The visible signes also become many waies incertain, by thicknes of aire, and dust, or raine, or snow, or sun-shine, or else thorow ground, that is vneuen, or full of trees, or of turnings. And sometimes it will not be easie to find out signes for all vses, occasions effoones presenting new matter, to the which a man is not accustomed. Yet can it not fall out, that either by voice, or by signal, we should not giue certaine and sure direction.

*Of marching, and of diuers kindes of Battales fit for a March: And
first of the right-induction, of the Coelembolos, and
the Triphalange to be opposed against it,*

CHAP. XXXVI.

BEING now to speake of *marshing* I will first giue to vnderstand, that some kind of *marsh* is a *Right-induction*, other some a *Deduction* on the right, or left hand; And that in a *single*, or *double*, or *treble*, or *quadruple-sided-battaille*. In a *single*, when one enemy is feated; in a *double*, when two; in a *treble*, when three; in a *quadruple*, when the enemy purpoeth to giue on on all sides. Therefore the *marsh* is vnder taken sometimes in a *single Phalange*, sometimes in a twofold *Phalange*, or else in a threefold *Phalange*, or in a fourfold *Phalange*.

A *right-induction* is, when one body of the same kinde followeth another; as if a *Xenagly* lead, and the rest follow *Xenagly*-wise. Or a *Tetrarchy* lead, and the rest follow according to that forme. It is so called, when the *marsh* stretcheth it selfe out into a wing hauing the *Depth* much exceeding the length.

Against it is opposed the * *Coelembolos*, which is framed, when the *Antistomos* * It is a Wedge.
* *Diphallange* discoyneth the Leading-wings, closing the *Reare* in manner of the letter V: as the figure after placed doth teach, In which the *front* is disseuered, & Double Phalange.
the *reare* ioyned, and knit together.

For the *Right-induction* pointing at the midst of the enemies battaille, the *Coelembolos* quickly opening before serueth both to frustrate the charge of the *front*, and to claspe in, and circumuent the *flankes* of the *right-induction*.
Further.

The Tactics

Furthermore * *Triphalange* is to be set against the *Colembolos*, one *Phalange* fighting against one *wing* of the *Colembolos*; The second against the other, and the middle, and third for bearing, and expecting a time fit to charge.

Of Paragee, or Deduction.

CHAP. XXXVII.

Paragee, or *Deduction* is, when the *Phalange* proceedeth in a *wing* not by *file*, but by *ranke*, hauing the Commanders, or *file-Leaders*, either on the right hand, which is called a *right-hand-Deduction*, or on the left hand, which is called a *left-hand-Deduction*. For the *Phalange* marcheth in a *double*, *treble*, or *quadruple* according to the place, and part, it is suspected, the enemy will giue on. And both the *Paragees* beginning the fight in flanke doe make the length double to the depth. This forme of fight was deuised to teach a Souldier to receiue heedfully the charge of the enemy not onely in front, but also in flanke.

Of the Phalange Amphistomus.

CHAP. XXXVIII.

* Double fronted Phalange.

The *Phalange* * *Amphistomus* (for it is so called, because it hath two fronts, and that part of the battaile, that is set, and aduanced against the enemy, is called a front) Seeing then in this forme the middlemost are ordered backe to backe, and those in front and *reare* make head against the enemy, the one being Commanders of the front, the other of the reare, therefore it is called *Amphistomus*. It is of great vse against an enemy strong in Horse, and able to giue a hot, and dangerous charge; and principally practised against those *barbarians*, that inhabit about the river *Ister*, whom they also call * *Amphippi* because they change Horses in fight.

* Amphistomus is set off two horses, one before, the other behind, and then again.

The Horse battaile to encounter this forme hath a *Tetragonall* shape, being for the purpose diuided into two *broad-squares* (they are *broad-squares*, that haue the front twice as much as the depth) And these *Squares* are opposed severally against the diuisions of the foot-battaile.

Of the Phalange Antistomus.

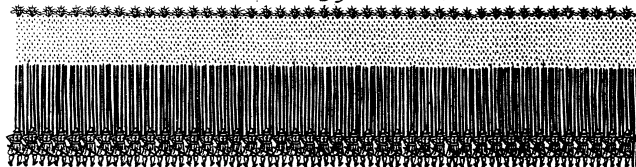
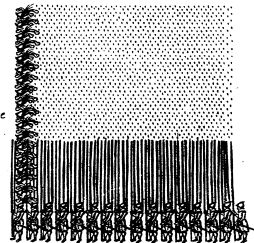
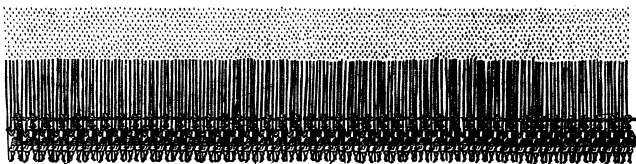
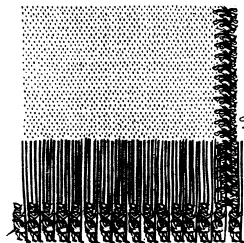
CHAP. XXXIX.

* Double flanked Phalange.

The *Phalange* * *Antistomus* is like the *Amphistomus* the forme being a little altered, so that it accustometh the souldier to resist the severall kinds of incursions of Horse. All that hath bene spoken concerning the former *Phalange* both for foote, and Horse agreeth with this figure also. Herein they differ, that the

Cap. 37.

A four fronted Phalange against all attempts of the Enemy

The Front of y^e reareThe Front of y^e right flankThe Front of y^e left flank

The Front of the March

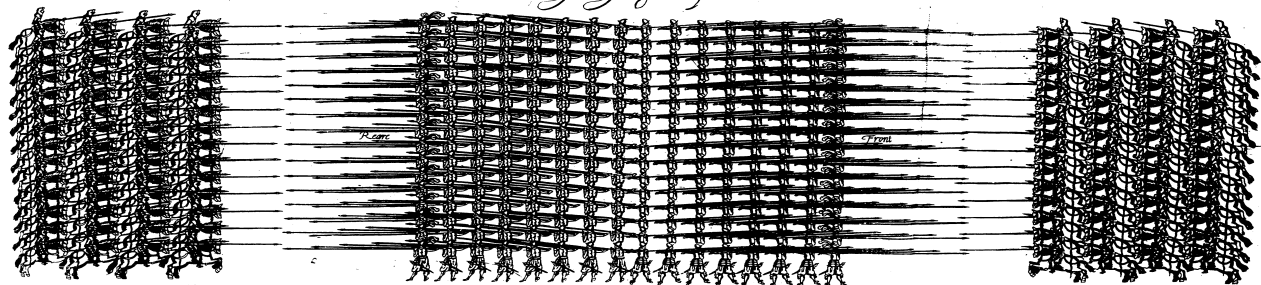
Of Ælian.

145

the *Amphistomus* receiveth the charge in front, and reare, the *Antistomus* in flanke But as well in the one, as the other, they fight with long Pikes, as doe the *Alms*, and *Sauomatans*. And the one halfe of the souldiers in the files turne their faces forward, the other halfe backward, so that they stand back to backe. This forme hath two fronts, the one before, where the file Leaders, the other behind, where the back-Commanders stand. And being also diuided into a *Diphalance* it maketh the fore-front with the one, and the alter-front with the other *Phalange*.

Of the *Diphalance Antistomus*.

Cap. 38.
The *Diphalance Amphistomus*



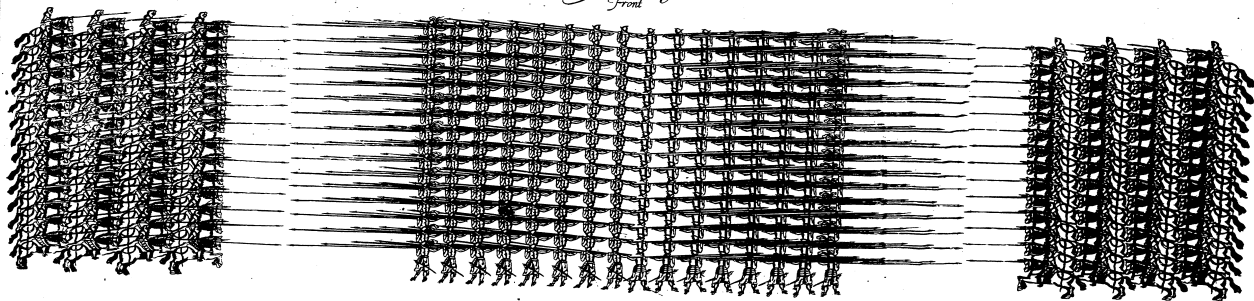
Of Ælian.

45

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Of the *Diphalange Antistomus*.

Cap. 39.
The *Phalange Antistomus*
Front



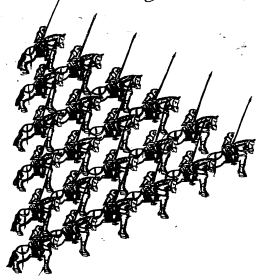
Of Ælian.

145

the *Amphistomus* receiveth the charge in front, and reare, the *Antistomus* in flanke But as well in the one, as the other, they fight with long Pikes, as doe the *Alans*, and *Sarmatians*. And the one halfe of the souldiers in the files turne their faces forward, the other halfe backward; so that they stand back to backe. This forme hath two fronts, the one before, where the file Leaders, the other behind, where the back *Commanders* stand. And being also diuided into a *Diphalange* it maketh the fore-front with the one, and the alter-front with the other *Phalange*.

Of the *Diphalange* Antistomus.

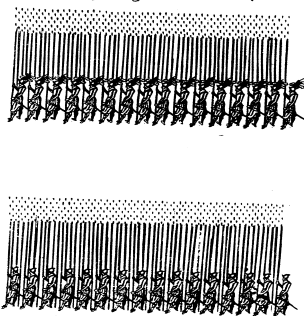
The Horseman's Wedge



Front

Cap. 40.

A *Diphalange* Antistomus



* Treble Phalange.

* Double Phalange.

* Horsemen that
use two horses,
and three, these
being called
den upon.

* Double Battled
Phalange.

Of Ælian.

the *Amphistomus* receiveth the charge in front, and reare, the *Antistomus* in flanke But aswell in the one, as the other, they fight with long Pikes, as doe the *Alani*, and *Sarmatians*. And the one halfe of the souldiers in the files turne their faces forward, the other halfe backward; so that they stand back to backe. This forme hath two fronts, the one before, where the file Leaders, the other behind, where the back-Commanders stand. And being also diuided into a *Diphalange* it maketh the fore-front with the one, and the after-front with the other *Phalange*.

Of the Diphalange Antistomus.

CHAP. XL.

A *Diphalange Antistomus* is that, which hath the file-Leaders placed not in *Deduction* outwardly, but inwardly face to face one against another, and the reare-Commanders without, one halfe in a right, the other in a left-hand *Deduction*.

This forme is used when the Horse giue on and charge *Wedge*-wise. For the * *Wedge* shooting forth into a point, and hauing the Commanders following in flanke, and endeavouring to disseuer, and breake the front of the foote, the Leaders of the foote, foreseeing their purpose, place themselves in the midst with intent either to repulse them, or else to giue them a thorough passage without losse. For the *Wedge* flieth vpon the foote in hope to charge the multitude in the midst, and to disorder the whole battaile: And the foote Commanders conceiuing well the fury of that kinde of forme, leaue a little space betwixt either front, and stand like walles on both sides, and jointly turning their faces toward the midst, giue them a fruitlesse, and empty passage.

This forme of Horse-battaile is called a *Wedge* by *Tacticks*, which was inuented by Philip King of *Macedon*, who placed his best men before, that by them the weaker sort might be held in; and enabled to the charge: as we see in a spear, or in a sword, the point whereof by reason of the sharpnesse quickly piercing maketh way for, and letteth in the middle blunt iron.

Of the Diphalange called Peristomus.

CHAP. XLI.

THE *Phalange* of the *Diphalange* * *Peristomus* proceedeth by *deduction* in a wing, the oblique *deduction* on the right hand hauing the file-Leaders without, the left hand oblique *deduction* the reare-Commanders within. The figure sheweth the intent of them that fight so ordered. For the battaile going to charge, hauing bene at first *Tetragonall*, diuideth it selfe into two oblique wings (the right, and the left) of purpose to enclose the aduerser *square-battaile*. And they fearing to bee inclosed transforme themselves into two severall marching *Phalanges* directing one against the right, the other against the left wing. Therefore it is called *Peristomus*, as hauing the front bent against the enemy both waies.

N

A

The Tactics

Of the *Diphalange* called *Homoioftomus*, and
of the *Plinthium*.

CHAP. XLII.

A double Phalange with contrary flank.
A *Diphalange** *Homoioftomus* is so named because a whole file (that is 16 men) moving by it selfe, another file followeth it. And it is therefore called *Homoioftomus*, because they that follow, follow in a like figure.

This kinde is opposed against the *Plinthium*. * *Plinthium* is a forme of Battaille, that hath the sides equall both in figure and number. In figure because the distances are euey where equall; In number because there are as many men in length, as in depth. In this *four-sided-Battaille* are none in the flanks, but armed, without Archer, or Slinger to helpe. When therefore two *Phalanges* march together, one by another, and both haue their Leaders either in a right-hand, or left-hand *Deduction* it is called a *Diphalange Homoioftomus*.

Of the *Diphalange Heteroioftomus*.

CHAP. XLIII.

* A double Phalange with contrary flank.

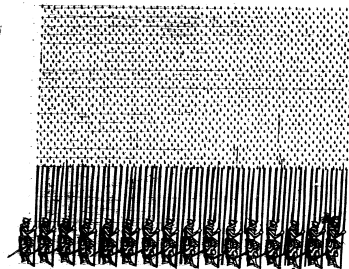
A *Diphalange** *Heteroioftomus* is that, which proceedeth by *Deduction*, hauing the Leaders of the former *Phalange* in a *right-hand-Deduction*, and of the following *Phalange* in a *left-hand-Deduction*: so that the battailes march counter-changeably, one hauing the Leaders in one flank, and the other in the other: and so the rest.

Again of the Battaille called a *Rhombus*, and of the
foote-halfe moone to encounter it.

CHAP. XLIV.

THe battaille framed in forme of a *Rhombus*, was first inuented by Ileon the *Thessalian*, and was called *Ile* after his name; and to this forme he exercised and accustomed the *Thessalians*. It is of good vse, in that it hath a Leader at euey corner, at the point the Captaine, of the Troupe, the reare-Commander behinde, and on either side the flanke-commanders. The foote battaille, fittest to affront this, is the *Menoides*, or *Cressant*, hauing both the wings stretched out, and in them the Leaders, and the middest imbowed to inuiroin and wrap in the Horsemen in their giuing on. Whereupon the Horsemen ply the foot a farre off with flying weapons, after the manner of the *Tarentines*, seeking thereby to disfolue, and disorder their circled frame of marching. *Tarentum* is a City of Italy, the Horsemen whereof are called *Acroboliti*; because in charging they first cast little *Darts*, and after come to hands with the enemy.

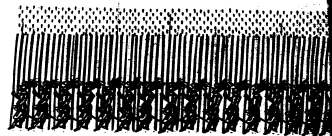
of

The Battaille called *Plinthium*

The front

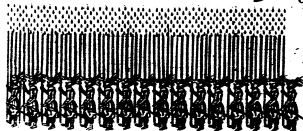


The front

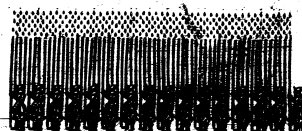


The front

Cap. 43.

The *Diphalange Heteroioftomus*

The leaders



The bringers

The Tactics

Of the *Diphalange* called *Homoiofotomos*, and
of the *Plinthium*.

CHAP. XLII.

The *Homoiofotomos* is so named because a whole file (that is 16 men) by it selfe, another file followeth it. And it is therefore called so because they that follow follow in a like figure. It is opposed against the *Plinthium*. * *Plinthium* is a forme of Battaille, as equall both in figure and number. In figure because the distances are equall, In number because there are as many men in length, as in breadth. In number because there are as many men in length, as in breadth. This *four-sided-Battaille* are none in the flanks, but armed, without need to helpe. When therefore two *Phalanges* march together, one ad both haue their Leaders either in a right-hand, or left-hand Dealed a *Diphalange Homoiofotomos*.

Of the *Diphalange Heterofotomos*.

CHAP. XLIII.

The *Heterofotomos* is that, which proceedeth by *Deduction*, having Leaders of the former *Phalange* in a *right-hand-Deduction*, and of the latter in a *left-hand-Deduction*: so that the battailles march counter one hauing the Leaders in one flanke, and the other in the other flanke.

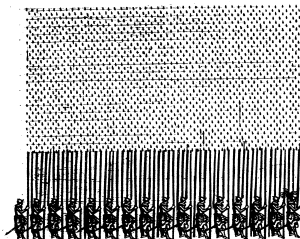
Againe of the Battaille called a *Rhombe*, and of the
foote-halfe moone to encounter it.

CHAP. XLIV.

A Battaille framed in forme of a *Rhombe*, was first inuented by Ileon the sonne of Nestor, and was called *Ile* after his name; and to this forme he exercised the *Thessalians*. It is of good vie, in that it hath a Leader at euery point the Capitaine, of the Troupe, the reare-Commander becom either side the flanke commanders. The foote battaille, fittest to be used, is the *Menides*, or *Crescent*, hauing both the wings stretched out, as the Leaders, and the middle imbowed to inuiron and wrap in the enemy in their giuing on. Whereupon the Horsemen ply the foot a farre off with their weapons, after the manner of the *Tarentines*, seeking thereby to disorder their circled frame of marching. *Tarentum* is a City of Italy, men whereof are called *Acrobolites*, because in charging they first cast stones, and after come to hands with the enemy.

of

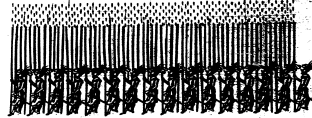
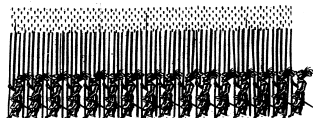
The Battaille called *Plinthium*



The front

Cap. 42.

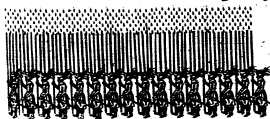
The *Diphalange Homoiofotomos*



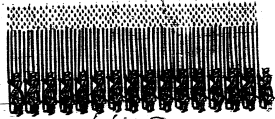
The front

Cap. 43.

The *Diphalange Heterofotomos*



The leaders



The bringers

Cap 45.

Plegophilanox, or y^e broad fronted
bataille of foote

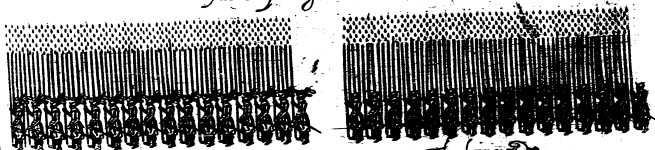
Rely.

Heteromakes or y^e Hone of Hone

The front

Cap 47.

The Diphallange Heterostomus



File leaders

The bringing

and to the full.

Again of the Bataille called a Rhombe, and of the
foote-halfe moone to encounter it.

CHAP. XLIV.

The bataille framed in forme of a Rhombe, was first inuented by Ileen the
Theffilian, and was called *Ile* after his name; and to this forme he exercised
and accustomed the Theffilians. It is of good vse, in that it hath a Leader at eue-
ry corner, at the point the Capitaine, of the Troupe, the reare-Commander be-
hind, and on either side the flanke-commanders. The foote bataille, fittest to
affront this, is the *Menoides*, or *Cressant*, having both the wings stretched out,
and in them the Leaders, and the middest imbowed to inuiron and wrap in the
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solue, and disorder their circled frame of marching. *Tarentum* is a City of Italy,
the Horsemen whereof are called *Acrobolists*, because in charging they first cast
little Darts, and after come to hands with the enemy.

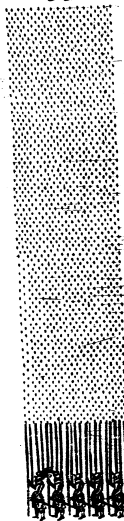
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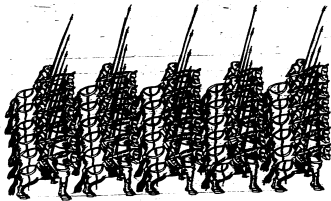
Host.

Cap. 45.

Plagiophalanx, or of broad fronted
battale of foote



Hieromachia, or of Hosts of Hosts



The front

At the
front
length

At the
battall
of men
ground

At the
length
of men
of Hosts

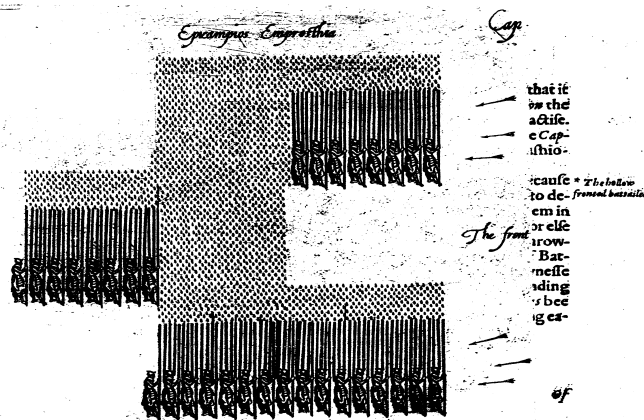
At the length of men of Hosts

Of the Horse-battaile Heteromekes, and of the
Plagiophalange to be oppos'd against it.

CHAP. XLV.

THE Horse battaile * *Heteromekes* is that, which hath the *depth* double to the *length*. It is profitable in many respects. For seeming to cary but few in so small a bredth it deceiveth the enemy, and it easily breaketh his forces with the thicknesse, and strength of the embattailing, and may without perceiuing, bee lead thorough straight, and narrow passages.

The Foot-battaile to encounter it is called the *Plagiophalange*, or *broad-fronted* Battaile. For being but slender in *depth* it beareth forth and extendeth it selfe in *length*; so that, albeit it be broken in the middelt with the charge of the Horse; yet is nothing broken, but a little of the *depth*; and the fury of the Horse is carried not vpon the multitude of the foote, but straight, and immediately, into the open field. And for that cause is the *length* thereof much exceeding the *depth*.



Of the Horse-battaile Heteromekes, and of the
Plagiophalange to be oppos'd against it.

CHAP. XLV.

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Of another kinde of Rhombe for Horsemen, and of the
foote-Battaile Epicampios Emprothia to
encounter it.

CHAP. XLVI.

ANother sort of *Rhomboides* there is, whereof I need say no more, but that it fleeth, and ranketh not. For I haue before shewed the vse, and that *Neon* the *Thessalian* was the inuentor, and that *Ision* *Medeas* husband most put it in practise. The vse thereof is great being directed, and lead, in the foure corners by the *Captaine*, the *Lieutenant*, and the two flanke-Commanders. It is commonly fashion'd of Archers on Horsebacke, as the *Armenian*, and *Persian* manner is.

Against it is oppos'd the foote-battaile called * *Epicampios Emprothia*, because * *The hollow* the *circumduction* of the *front* is like an embowling. The end of this forme is to de- *frontal* frontal battaile. ceue and ouer-reach the Archers on Horsebacke either by wrapping them in the void space of the front, as they charge, and giue ont vpon the spurre, or else disordering them first with their wings, and breaking their fury, by ouerthrowing them finally with their ranks about the middle *Emprothes*. This kinde of Battaille was devised to entrappe and beguile. For opening the middle hollownesse it maketh shew but of a few, that march in the *wings*, hauing notwithstanding thrice as many following, and seconding, in the reare. So that, if the *wings* bee of power sufficient for the encounter, there needeth no more; if not, retiring easily on either side, they are to ioyne themselves to the buike of the Battaille.

The Tactics

Of the foot-bataile called *Cyrt*, which is to be set
against the *Epicampios*.

CHAP. XLVII.

* The convex
bataile.

THE Bataile to be opposed against the *Epicampios* is called * *Cyrt* of the circumference forme. This also maketh semblance of small forces by reason of the convexitie of the figure. For all round things appeare little in compasse; and yet stretched out in length, and singled, they prove twice as much, as they appeared to be: as is evident in pillars, which are round; and therefore in fight shew the one halfe, and conceale the other.

The greatest piece of skill in embattailing, is to make a shew of few men to the enemy, and indeed to bring twice as many to fight.

Of the *Tetragonall Horse-bataile* and of the wedge
of foote to be opposed against it.

CHAP. XLVIII.

* Four-square.

THE * *Tetragonall Horse-bataile* is square in figure, but not in number of men. For in *Squares* the number is not alwaies the same; and the Generall for his advantage may double the length to the depth. The *Persians*, *Sicilians*, and most of the *Grecians* doe affect this forme, and take it to bee easie in framing, and better in use.

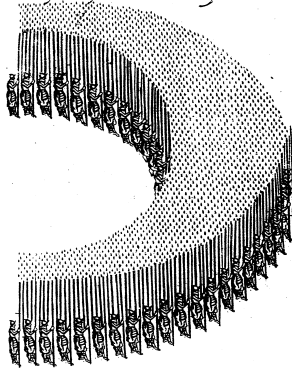
* Wedge.

Against it is opposed the *Phalange* called * *Emboles*, or *Wedge* of foote, all the sides consisting of armed men. This kinde is borrow'd of the *Horse-mans wedge*. And yet in the *Horse-wedge*, one sufficeth to lead in front, where the Foote-wedge must have three, one being vnable to beare the sway of the encounter. So *Epaminondas* the *Theban* fighting with the *Lacedemonians* at *Mantineia*, overthrew a mightie power of theirs by casting his armie into a *Wedge*. It is fashioned if the *Antistomus Diphalangy* in marching ioyn the front of the wings together, holding them open behind like unto the letter A.

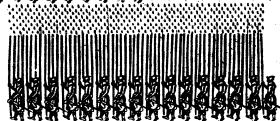
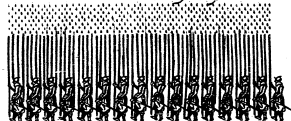
Of the foot-Bataile called *Placium*, and of the winding, or saw-fronced foot-bataile to encounter it.

CHAP. XLIX.

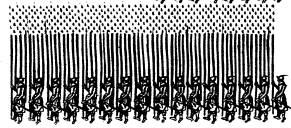
THE Bataile *Placium* hath the length much exceeding the depth. And it is called *Placium*, when armed foote are placed on all sides, the Archers, and Slingers, being throwne into the midst. Against this kinde of Bataile is set the winding-fronced-bataile, to the end that with the vnequall figure, they may

The *Cyrt* or convex halfe Name

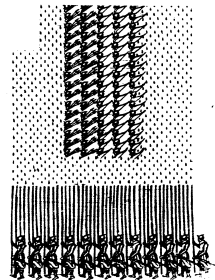
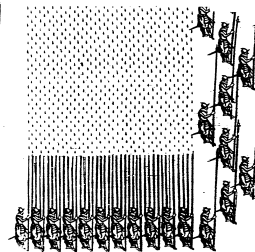
Cap. 47.

The *Epicampios*

The front



The front



* The counter-battaile.

THe Battail cumfcripte the counter-battaile oyer stretched oured to be: as is ea the one halfe, an
The greatest the enemy, and i

* Four-square.

THe * *Tetrag* For in *Squa* aduantage may e of the *Gracians* de ter in use.

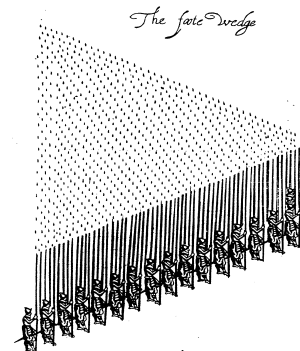
* Wedge.

Against it is op fides consisting of armed men. And yet in the Horse-wedge, one sufficeth to lead in front, where the Foote-wedge must haue three, one being vnable to beare the sway of the encounter. So *Epaminondas* the *Theban* fighting with the *Lacedemonians* at *Mantinee*, ouerthrew a mightie power of theirs by casting his armie into a *Wedge*. It is fashioned if the *Antistomus* *Diphalangy* in marching ioyned the front of the wings together, holding them open behind like vnto the letter *A*.

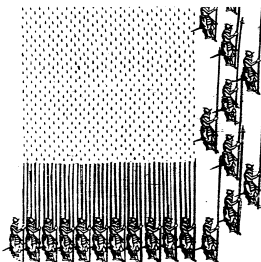
Of the foot-Battaile called Plectum, and of the winding, or saw-fronted foot-battaile, so encounter it.

CHAP. XLIX.

THe Battaile *Plectum* hath the length much exceeding the depth. And it is called *Plectum*, when armed foote are placed on all sides, the Archers, and Slingers, being throwne into the midst. Against this kinde of Battaile is set the winding-fronted-battaile, to the end that with the vnequall figure, they may



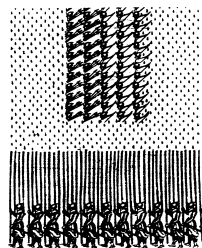
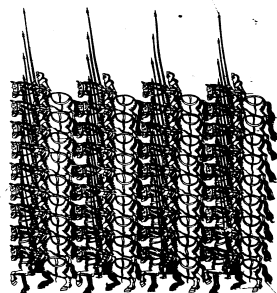
The sawe Wedge



The front

Cap. 48.

The Horbattaile square in figure, not in horre



* The convex
bataile.

THe Ba-
cumbe
the convex
yet stretche
red to be: as
the one half
The grea
the enemy:

* Four-square.

THe * T.
For in
advantage
of the *Gracia*
ter in vfe.

* Wedge.

Against it
sides confist
And yet in
wedge mult

So *Epaminondas* the *Theban* fighting with the *Lacedemonians* at *Mantinee*, over-
threw a mightie power of theirs by casting his armie into a *Wedge*. It is fashioned
if the *Antistomus* *Diphalangy* in marching ioyne the front of the *wings* together,
holding them open behind like vnto the letter *A*.

*Of the foot-Bataile called Picefium, and of the win-
ding, or saw-fronted foot-bataile, to
encounter it.*

CHAP. XLIX.

THe Bataile *Picefium* hath the length much exceeding the depth. And it is
called *Picefium*, when armed foote are placed on all sides, the Archers, and
Slingers, being throwne into the middest. Against this kinde of Bataile is set
the winding-fronted-bataile, to the end that with the vnequall figure, they may
traîne

Cap. 50.

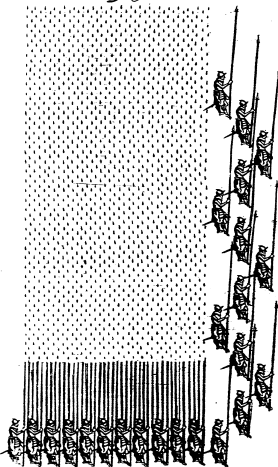
The aduerse bataile

The overfrowning bataile

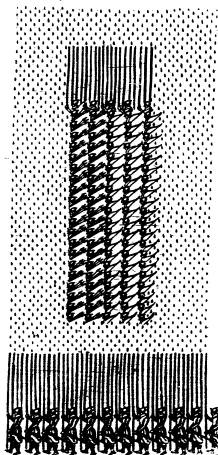


Cap. 49.

The Poplegmene



The Picefium



The front

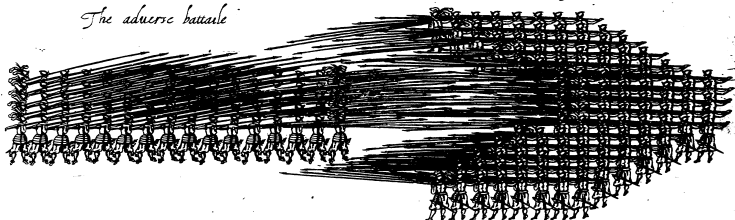
* The convex-
battaile.

THe Battumfe
the convexi
yet stretche
red to be: as
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Cap. 50.

The adversie battaile

The overfronting battaile



Of conveying the Carriage of the Army.

CHAP. LI.

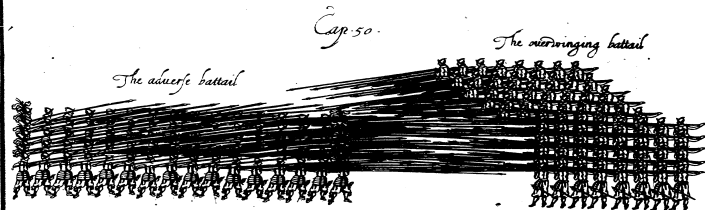
THe leading of the carriage, if any thing else, is of great importance, and requireth a speciall Commander. It may bee conveyed in five manners, either before the Arme, or behinde, or on the one flanke, or the other, or in the middelt.

Before the Army, when you feare to bee charged behind. Behind the Army, when you would leade toward the enemy. VVhen you feare to bee charged in flanke on the contrary side. In the middelt, when a *hollow-Battaile* is needfull and fit.

Of the words of Command, and certaine observations about them.

CHAP. LII.

Aft of all wee will briefly repeate the words of direction, if we admonish, first that they ought to be short, then that they ought to be without *double-signification*. For the Souldiers, that in haft receive direction, had neede to take heede of doubtfull words, least one doe one thing, and another the contrarie. As for the



THESE TWO BATTALIONS ARE IN A LINE. NUMBER IS SET.

Of conveying the Carriage of the Army.

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traîne out those of the *Plafum* to cope with the foremost of the *winding-fronted-battaille*, and by that meanes dissolve, and disorder the thicknesse of the *jamme*. And the file-*Leaders* of the *winding-battaille* are to observe, and make the file-*Leaders* of the *Plafum*, that if they still maintaine their closefesse, and fight ferred, they also encounter them in the like forme; if the *Plafum* file-*Leaders* sever themselves, and spring out from their maine force, then they likewise bee ready, to meet them man to man.

Of *Hyperphalangeis*; and *Hyperkerasis*; and
of *Attenuation*.

CHAP. L.

Hyperphalangeis, or *over-fronting* is, when both *wings* of the *Phalange* overreach the enemies front. *Hyperkerasis*, or *overwinging* is, when with one of the *wings* we overreach the front of the enemy. So that hee, that *overfronteth*, *overwingeth*, but hee, that *overwingeth*, *overfronteth* not. For they, that match not the enemy in multitude, may yet *overwing* them. *Attenuation* or lessening is, when the depth of the battaile is gathered up; and in stead of 16 men a smaller number is left.

Of conveying the Carriage of the Army.

CHAP. LI.

The leading of the carriage, if any thing else, is of great importance, and requieth a speciall Commander. It may bee conveyed in five manners, either before the Armie, or behinde, or on the one flanke, or the other, or in the middest. Before the Army, when you feare to bee charged behind. Behind the Army, when you would leade toward the enemy. When you feare to bee charged in flanke on the contrary side. In the middest, when a *hollow-Battaile* is needfull and fit.

Of the words of Command, and certaine observations about them.

CHAP. LII.

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The Tactics

purpose: If I say *turne your face*, some it may be, that heare mee, will turne to the right, some to the left hand, and so no small confusion follow. Seeing therefore these words *turne your face* import a generall signification, and comprehend *turning to the right, or left hand*, we ought in stead of saying *turne your face to the pike*, to pronounce it thus: *To your Pike turne your face*, that is, we ought to set the particular before, and then inferre the generall. Like reason is, if you say, *turne about your face, or countermarch*. For these are also generall words; And therefore wee should do well to set the particular before. As to the Pike *turne your face about*, or to the Target *turne your face about*. Likewise the Lacedemonian *countermarch*, nor the Counter march Lacedemonian. For if you place the word *Countermarch* first, some of the Souldiers will happily fall to one kind, other to another kinde of Counter-march. For which cause words of double sense are to be avoided, and the special to be set before the generall.

Of silence to be used by Souldiers.

CHAP. LIII.

BUt above all things silence is to be commanded, and that heed be given to directions: As *Homer* specially signifieth in his descriptions of the *Graecian* and *Troian* fights.

*The skilfull Chief-taines pressed on, guiding with carefull eie
Their Armed troupes, who followed their Leaders silently,
You surely would have deem'd, each one of all that mighty throng
Had been bereft of speech, so bridled he his heedfull tongue,
Fearing the dread Commander's checke, and awfull host's among.
Thus march'd the Greekes in silence, breathing flames of high desire,
And fervent zeale, to backe their friends, on foes to wreake their ire.*

As for the disorder of the *Barbarians* he resembleth it to birdes saying.

*As flocks of fowle, geese, cranes, and swannes with necks far stretched out,
Which in the stony fennes Caisters winding streames about
Sheare here, and there, the liquid skie, sporting on winton wing:
Then fall to ground with clanging noise, the fennes all ouer ring:
None otherwise the Troians fill the field with heaped sounds
Of broken, and confused cries, each where tumult abounds.*

And againe:

*The Captaines marshall out their Troupes ranged in goodly guise;
And forth the Troians pace like birds, which lade the aire with cries.
Not so the Greekes, whose silence breathed flames of high desire,
Fervent in zeale to backe their friends, on foes to wreake their ire.*

CHAP.

of *Aelian*.

The words of Command.

CHAP. LIIII.

Thus then are we to command.

- T**O your Armes.
Stand by your Armes.
Carriage away from the battaile.
Marke your directions.
Seperate your selves.
Advance your Pikes.
File and ranke your selves.
Looke to your Leader.
Reare Commander order your file.
a Keepe your first distances.
b Faces to the Pike, moue a little further, stand so, as you were.
b Faces to the Target, moue a little further, stand so.
b Faces about to the Pike, moue a little further, stand so.
c Double your Depth. To your first posture.
c Double your Length. To your first posture.
d The Lacedemonian countermarch. To your first posture.
d The Macedonian countermarch. To your first posture.
d The Choraan countermarch. To your first posture.
e Battaile wheele to the Pike. To your first posture.
e Battaile wheele about to the Pike. To your first posture.

a Before cap. 110.

b Before cap. 105.

c Before cap. 105.

d Before cap. 105.

e Before cap. 105.

These precepts of the Art *Tacticke* (most inuincible *Cæsar*) I have laide out to your Ma^{ties}, which will be a meanes of safety to such, as shall use them, and of the ouerthrow of their enemies.

4

The



THE EXERCISE OF THE ENGLISH IN

the seruice of the high and mighty Lords,
the LORDS the ESTATES of the vni-
ted PROVINCES in the Low
COUNTRIES.



HE Soldiers are diuided into two kinds, *Foote* and *Horse*. The *Foote* againe are of two kinds; *Pikemen* and *Musketers*.

Pikemen are armed with a head-peece, a Curace and Tasse defensive, and with a Pike of fiftene foote long, and a Rapier offensive. The Armour is all yron; the Pike of Ashen wood for the Steele, and at the vpper end an yron head of about a handfull long with cheekes about the length of two foote, and

at the butt-end a round strong socket of yron ending in a pike, that is blunt, yet sharpe enough to fixe to the ground. The forme thereof is expressed in the grauen figure.

The *Musketer* hath a head-peece for defence, a *Musket*, the barrill of the length of 4 foote, the bore of 12 bullets to the pound; a Bandler, to which are fastned a convenient number of charges for powder (sometimes as many as 15 or 16) a leather bagge for bullets, with a pruning yron; a Rest for the *Musket* with an yron forke on the vpper end to support it in discharging, and a pike on the nether end to sticke into the ground; lastly, a Rapier. The figure of this armour also is here inferred.

These soldiors, both Pike-men, and Musketers, are diuided into Companies; and euery Company consisteth, halfe of Pikes, halfe Musketers. The Companies are some more in number, some lesse. Some reach to 300 men, some 200, some 100, some 90, some 80, some 70. Euery Company hath these officers of the field; A Capitaine, a Lieutenant, an Ensigne, 2 Sericants, 3 Corporalls, two Drummes; and for other vses a Clerke, a Surgion, and a Prouost.

Companies are compacted into Regiments; and the Regiments commanded by Coronells. Regiments containe not alwaies a like number of Companies, some hauing 10, some 11, 12, 13, 14, 15, some 20 Companies and aboue. In euery Regiment are a Coronell, a Lieutenant Coronell, a Sericant Maior, all officers of the field; a Quarter-master, and a Prouost-martiall for other employments. It shall not be greatly to the purpose to mention higher officers, then Coronells, my principall intent being no other, then to set downe the armes and exercise of our Nation in the said vniued Provinces. Their names are spoken of.

Their exercise followes.

The Exercise of a foote Companie.

First both Pikes and Muskets are ordered into files of 10 deepe. The Muskettiers are sometime placed before, sometime in flanke, sometimes in the reare of the pikes.

To exercise the motions, there are two distances to be obserued.

The first is when euery one is distant from his fellow 6 foote square, that is in file and ranke 6.

The second is when euery Souldier is 3 foote distant one from the other as well in file, as in Ranke.

And because the measure of such distances cannot be taken so iustly by the eye, the distance of 6 foot betwixt the files is measured, when the Souldiers stretch out their armes doe touch one an others hands: and betwixt the Ranks, when the ends of their pikes come well nigh to the heeles of them, that march before. And the measure of 3 foote betwixt the files is, when their elbowes touch one another; betwixt the ranks, when they come to touch the ends of one anothers Rapiers.

For to march in the field, the distance of 3 foote from file to file is kept, and of 6 foote from Ranke to Ranke.

To order themselves in Battaile, as also to goe towards the enemy, the distance of 3 foote in file, and ranke, is obserued; and likewise to conuersion or wheeling.

The Musquettiers also going for to shoote by Ranks keep the same distance of 3 foot, but going to skirmish they goe *a la Disbandade*, which is out of order.

There is yet another sort of distance, which is not vled, but for to receive the enemy with a firme stand, and serue for the pikes onely (for the Musquettiers cannot be so close in files, because they must haue their Armes at liberty) & that is, when euery one is distant from file to file a foote and a halfe, and 3 foote from Ranke to Ranke. And this last distance is thus commanded, *Close your selues thoroughly*. But it is not to be taught the Souldiers, for that, when necessitie shall require it, they will close themselves but too much, of their owne accord without command.

To begin therefore to doe the exercises, the Company is set in the first distance, to wit of 6 foote in file, and ranke, and thus is said

Stand right in your files.

Stand right in your ranks.

Silence.

To the right hand.

As you were.

To the left hand.

As you were.

To the right hand about.

To the left hand as you were.

To the left hand about.

To the right hand as you were.

These are the generall words of Command which are often to be vled.

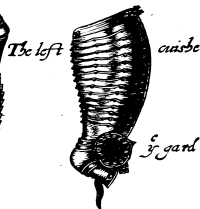
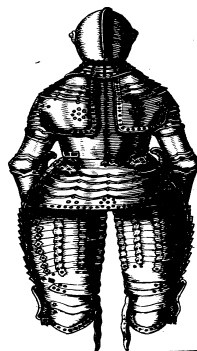
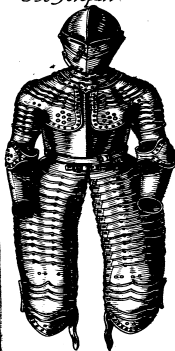
You must note, that when they are commanded to be as they were, they must returne thither, from whence they parted; and if they turned to the right hand, they must returne to the left, and so in counter-march.

To



The forepart

The backe



Charge

The Exercise of a foote Companie.

First both Pikes and Muskets are ordered into files of 10 deepe. The Musketers are sometime placed before, sometime in flanke, sometimes in the reare of the pikes.

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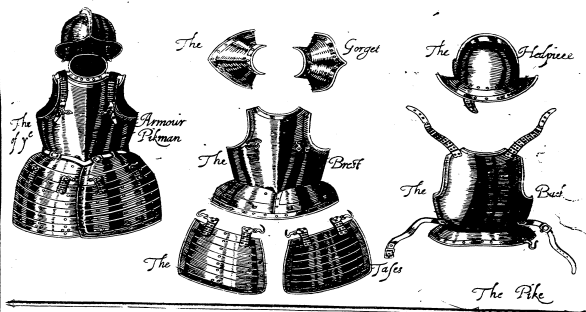
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For the Pike with a firme stand.

To the right hand wheele.

To the left hand wheele.

Open your Ranks backwards in your double distance to wit at 12 foote, and this for a single Company.

Ranks as you were, &c. at the first.

In opening Ranks or Files, you must keepe them close vntill the second Ranke or File beginning from the outsid es haue taken their distances, and so shall the rest remaine close vntill euery Ranke or File haue taken their distances in order.

Open your files, to wit to the first distance of 6 foote.

If you will command to close files to the right hand or left hand, the outmost file standeth still, and the rest close to that file.

For the Pike with a firme stand.

Advance your Pikes.

Order your Pikes.

Slope your Pikes.

Charge

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To the right double your ranks.
Ranks as you were.

To the left hand double your ranks.
Ranks as you were.

To the right hand double your files.
Files as you were.

To the left hand double your files.
Files as you were.

With halfe files to the right hand double your Ranks.
Halfe files as you were.

With halfe files to the left hand double your Ranks.
Halfe files as you were.

Files to the right hand countermarch.
Files to the left hand countermarch.

To the right hand or left at discretion as you were.

Ranks to the right hand countermarch.
Ranks to the left hand countermarch.

To the right or left hand as you were.

Close your Files 2 to 3 foote distance.
Close your Ranks 5 to 3 foote distance.

Understand that in Closing from the outfiles to the middle the Soldier is to stand in his distance of 3 foote in file, and not closer.

To the right hand wheele.
To the left hand wheele.

Open your Ranks backwards in your double distance to wit at 12 foote, and this for a single Company.

Ranks as you were, &c. at the first.

In opening Ranks or Files, you must keepe them closed untill the second Ranks or File beginning from the outfiles have taken their distances, and so shall the rest remaine close untill every Ranks or File have taken their distances in order.

Open your files, to wit to the first distance of 6 foote.

If you will command to close files to the right hand or left hand, the outmost file handeth still, and the rest close to that file.

For the Pike with a firme stand.

Advance your Pikes.
Order your Pikes.
Slope your Pikes.

Charge

Charge your Pikes.
Order your Pikes.
Traile your Pikes.
Chcecke your Pikes.

More for the Pikes first with a firme stand and then marching.

Charge your Pikes.
Slope your Pikes.
To the right hand charge your Pikes.
Slope your Pikes.
To the left hand charge your Pikes.
Slope your Pikes.
Charge your Pikes to the Reare.
Slope your Pikes.
Order your Pikes.

This must be observed charging your Pikes with a firme stand to see the right flank behind, and charging the Pikes marching to see the left flank before.

For the Muskets.

The Postures in his Excellencies Booke are to be observed; but in exercising you must only use these three termes of direction.

Make ready.

Present.

Give fire.

Your Muskettiers must observe in all their motions to turne to the right hand, and that they carry the mouth of their peeces high, aswell when they are shouldred, as in punning, and also when they hold their pannes garded, and come vp to give fire.

The enemy before the Vanguard.

In advancing towards an Enemy, when they doe not skirmish loose and disbanded, they must give fire by Ranks after this manner.

Advancing.

Two Ranks must alwaies make ready together, and advance ten paces forward before the body, at which distance, a Sergeant (or when the body is great some other officer) must stand, to whom the Muskettiers are to come vp before they present, and give fire, first the first rank. And whilest the first gives fire, the second Rank keepe their Muskets close to their Rels, and their pannes garded, and assoone, as the first are fallen away, the second presently present, and give fire, and fall after them.

Now assoone as the first two Ranks doe move from their places in the front: The two Ranks next them must vnshoulder their Muskets, and make ready, so as they may advance forward ten paces as before assoone as ever the two first ranks are fallen away; and are to doe in all points as the former. And all the other Ranks through the whole division must doe the same by twos, one after another.

A manner

A manner there is to give fire retyring from an Enemy, which is performed after this sort.

As the Troope marcheth the hindermost ranke of all keeping still with the Troope is to make ready, and being ready, the fouldiers in that ranke turne also together to the right hand and give fire, marching presently away a good round pace to the front, and there place themselves in ranke together just before the front: As soone as the first ranke turne to give fire, the ranke next makes ready, and doth as the former, and so the rest.

The enemy is the flank.

We give fire by the flanks thus. The vppermost file next the Enemy must be commanded to make ready, keeping still along with the body, till such time, as they be ready, and then they turne to the right, or left flank (according to the sight of their enemies either vpon the right, or left flank) and give fire altogether. When they haue discharged they shirre not, but keepe their ground, and charge their Peeces againe in the same place, they stand. Now as soone as the forelaid file doth turne to give fire, the vtermost next it makes ready alwaies keeping along with the Troope till the Bringer-up be past a little beyond the Leader of that file, that gaue fire last; and then the whole file must turne, and give fire, and doe in all points as the first did, and so the rest one after the other. A Sergeant, or if the Troope be great some other better qualified Officer must stand at the head of the first file, and assoone as the second hath given fire, and hath charged, he is to lead forward the first file vp to the second file, and so to the rest one after another, till he hath gathered vp againe the whole wing, and then he is to loyne them againe in equall front with the pikes.

The enemy is the flank.

Last of all the Troope or whole wing of Muskettiers makes ready altogether, and the first ranke without advancing gives fire in the place they stand in; and speedily as may be, yet orderly falls away, all the ranks doing the same successively one after another.

without advancing.

Thus much of the armes and exercise of the foote.

The horse ensue.

The order and discipline holden in Horse-troopes, or in the Cavalry.

THE Cavalry hath for his Chiefe the Generall, the Lieutenent Generall, and the Comissary generall.

To the Cavalry there is a Quarter-master generall, and a Prouost generall belonging; the Iustice reformeth to the Councell generall of warre of the Army.

The Cavalry is of two sorts. *Harquebussiers, and Curassiers.*

The first haue for defensive armes, the Curace pistoll prooffe, and a light head-peece. For offensive the *Carbine* of 3 foote, 3 inches length, and the bore of 20 bullets in the pound, and *Pistolls* like vnto the *Curassiers*.

The *Curassiers* haue for defensive Armes a complete armour, the Curace pistoll prooffe. For offensive two pistolls hauing the barrill of 26 inches in length, and the bore of 36 bullets in the pound. See the figure of Armes.

For the order in Regiments the 40 Companies entertained by the States doe make cleuen Regiments.

The Regiment of the Generall hath alwaies the Vanguard, the others alternately

natiuely and by turnes, and he that hath it this day, the next day after hath the Reare, the rest following in the same sort.

Those which command the Regiments are called *Coronells*. The Regiments are compounded of 3, or 4 Companies (of 3 at the least) and the Coronells Company marcheth alwaies on the left wing of the Regiment.

The Capitaines receive orders from their Coronells, as these from the Com-missary Generall.

All the Companies are diuided in 3 equall parts, which are called Squadrons, and distributed to the three chiefe officers; Capitaine, Cornett, and Lieutenant, hauing each of them adioyned an old Souldier, which they doe know to bee of more desert, called a Corporall.

Marching in the field, every Officer marcheth at the head of his Squadron, the Lieutenant excepted, which marcheth behind with the Quartermaster; and the third Corporall at the head of the Lieutenants Squadron.

The Companies are diuided by files, and ranks, the file 5 deepe, and no more, how strong soeuer the Company be.

They obserue that in marching in battaile they must be close together, and to doe the *Motions* there must be 6 foote distance from one Horseman to another.

The Companies being in battaile, there must be 25 paces distance left between every Company, and 50 betwixt every Regiment at the least.

The exercise of Armes for the Cavalry.

To open the Squadron you must first open the ranks and after the files.

To close the Squadron, you must first close the files, and after the ranks.

There be two sorts of distances betwixt the files; the one close, and the other open.

In the Close there must be no distance or intervalls betwixt the files, to the open there must be 6 foote betwixt every file.

Likewise there must be two sorts of distances betwixt the ranks; the Close, which must be without intervall or streete; and the Open, which must be six foote distance.

In a march it must be understood, that the ranks must neuer be more opened, then the open distance of 6 foote.

And to the end that the Troope may march in good order, and obserue well their distance betwixt the ranks, without that the last may be forced to runne or goe to fast, there must be heed taken, that so soone, as the first ranks begin to march, all the Troope, and the Reare also at one time march.

The words of Command are

Open your Ranks.

Open your files.

Stand right in your ranks.

Stand right in your files.

To the right hand.

As you were.

To

To the left hand.

As you were.

To the right hand about.

To the left hand as you were.

To the left hand about.

To the right hand as you were.

Files to the right hand countermarch.

Files to the left hand countermarch.

To the right or left hand as you were.

Ranks to the right hand countermarch.

Ranks to the left hand countermarch.

Close your files.

Close your ranks.

To the right hand wheele.

To the left hand wheele.



Files

Pag. a. in the margin beneath, for *Spartianum* read *Spartianum*. Pag. 9. lin. 10. for *was*, were. & lin. 31. for *Bircenna*, *Bircenna* 3 and in the marg. for *Diposofph*, *Diposofph*. pag. 10. lin. 26 in marg. for *Adrian*, *Adrian*. p. 11. lin. 1. in marg. for *Diposofph*, *Diposofph*. p. 15. l. 18. for *Metastilane*, *Metastilane*. p. 17. l. 47. for *Thames*, *Thames*. p. 18. l. 49. for *conceded* by, *concededly*. p. 20. l. 45. for *Thurex*, *Thurex*. lin. 48. dele *sub*. p. 21. l. 1. for *Thuse*, *Thuse*. l. 11. for *Orchane*, *Orchane*. l. 32. dele *Them*. p. 23. l. 13. for *Diverenti*, *Diverenti*. pag. 1. for *imitation*, *imitation*. p. 28. l. 11. for *Orchane*, *Orchane*. l. 13. dele *Them*. p. 29. l. 1. for *quary*, *quary*. l. 5. *singer*, *singer*. p. 30. l. 35. in marg. *Ameliff*. *Ameliff*. p. 31. l. 13. *putt*, *putt*. p. 32. l. 29. & 33. for *belly*, *belly*. p. 33. l. 3. 8. 21. for *Soridan*, *Soridan*. p. 34. l. 3. for *foreble*, *foreble*. l. 19. *Popane*, *Popane*. 28. *usuable*, *usuable*. l. 43. dele *once*, & for all p. 35. l. 42. *rediff*, *rediff*. p. 36. l. 40. in marg. *de bett*, *de bett*. p. 39. l. 17. *frick*, *frick*. pag. 112. in marg. *Enonien*, *Enonien*. 24. *Enonien*, *Enonien*. 31. 33. *Præfess*, *Præfess*. lin. 47. after *Patrician*, a full point. p. 49. l. 27. *Bartho*, *Bartho*. 40. *lipessant*, *lipessant*. p. 50. l. 14. after *supported*, a full point. 34. *essity*, *essity*. p. 51. l. 6. *Præfess*, *Præfess*. pag. 55. l. 13. for *having*, *having*. pag. 56. l. 18. *for*, *for*. lin. 33. 37. *Præfess*, *Præfess*. 41. *Præfess*, *Præfess*. 46. a full point after through. p. 57. l. 13. *betwixt* the, and *exempt*, *pur* former. p. 58. l. 13. *Thas*, *Thas*. lin. 18. after *Acmonia*, a full point. 37. *abey*, *abey*. 48. after *number*, a full point. p. 59. l. 6. *speedily*, *speedily*. 36. *motion*, *motion*. 39. 40. *youe*, *youe*. 41. after *some*, a full point. p. 60. l. 16. *fast*, *fast*. 18. after *may*, *may*. p. 62. l. 15. for *ten*, *ten*. lin. 23. for *ten*, *ten*. p. 66. l. 16. for *ten*, *ten*. lin. 24. read, *when it is greater* in *Xenophon* both *no more*, then *ten*. pag. 68. l. 25. *happes*, *happes*. p. 70. l. 40. *fight*, *fight*. read *men*. pag. 71. l. 1. after *Some*, *for*, read, and. l. 37. *for*, *for*. p. 75. l. 19. & 27. *Lothghe*, *Lothghe*. l. 32. *Templandor*, *Templandor*. p. 78. l. 2. & 9. *of*, *of*. p. 79. l. 11. for *fourth*, *fourth*. p. 80. l. 19. *infert*, *infert*. 20. *Army*, *Army*. 26. *month*, *month*. p. 81. l. 47. after *infert*, *infert*. pag. 81. lin. *Targat*, *Targat*. lin. 30. for *6130*, read *6144*. pag. 81. l. 4. *Philopomus*, *Philopomus*. p. 87. l. 16. *Quoniam*, *Quoniam*. l. 37. after *im*, *im*. l. 11. *infert*, *infert*. p. 88. l. 17. *fight*, *fight*. p. 90. l. 41. *they*, *they*. p. 91. l. 130. *tenue*, *tenue*. pag. 2. l. 19. after *1024* *men*, *infert* *700* *Syphacum* *an* *Epiphany* *of* *1024* *men*. p. 96. l. 44. after *flank*, *infert*, and *from* p. 98. l. 37. after *Amphofes* *are*, *infert*, *wey* *be*. p. 99. l. 18. for *fight*, *fight*. p. 112. l. 44. *maner*, *maner*. p. 114. l. 23. read *fight* *fight*. *Barmanor*. p. 114. l. 24. *great*, *great*. p. 124. l. 4. *Lucidum*, *Lucidum*. lin. 21. a comma after *pointing* *it* *of* another comma after *founder*. p. 124. l. 19. after *passed*, *put* out, *bat*. p. 130. l. 28. for *and* *for*. p. 135. lin. *Middle*, *Middle*. 26. *infert*, *infert*. pag. 136. l. 4. after *particular*, *infert*, *be*. lin. 20. after *double*, *infert*, *which*. p. 138. l. 15. read *Enonien*, the *folow* *are* *fall* pag. 138. l. 139. pag. 142. l. 12. for *Chap*, *Chap*. read *34*. pag. 151. l. 23. after *Reper*, *infert* *for* *offense*. pag. 151. l. 26. after *6*, *dele* *fore*. lin. 24. after *thin*, *infert*, *be*. pag. 151. lin. 1. after *regis*, *infert*, *found*.



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